# 1996 IUCN Red List of Threatened Animals

Compiled and Edited by Jonathan Baillie and Brian Groombridge





A/N 12324 RD (100) 59 RL96

#### © 1996 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational and other non-commercial purposes is authorized without permission from the copyright holder, provided the source is cited and the copyright holder receives a copy of the reproduced material. Reproduction for resale or other commercial purposes is prohibited without prior written permission from the copyright holder.

(cory)

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Citation: IUCN 1996. 1996 IUCN Red List of Threatened Animals. IUCN, Gland, Switzerland.

ISBN 2-8317-0335-2

Co-published by IUCN, Gland, Switzerland and Cambridge U.K., and Conservation International, Washington, D.C., U.S.A.

Available from: IUCN Publications Services Unit, 219c Huntingdon Road, Cambridge, CB3 0DL, United Kingdom. Tel: + 44 1223 277894; Fax: + 44 1223 277175; E-mail: iucn-psu@wcmc.org.uk. A catalogue of all IUCN publications can be obtained from the same address.

Camera-ready copy of the introductory text by the Chicago Zoological Society, Brookfield, Illinois 60513, U.S.A. Camera-ready copy of the data tables, lists, and index by the World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge CB3 0DL, U.K.

Printed by Kelvyn Press, U.S.A.

Paper: Printed on Lithofect Plus (50% recycled fiber with a minimum 20% post-consumer fiber) with soy-based inks.

Cover photo: Radiated tortoise, Geochelone radiata (John L. Behler).

# 1996 IUCN Red List of Threatened Animals

Compiled and Edited by

Jonathan Baillie and Brian Groombridge

#### with the assistance of

Mariano Gimenez Dixon, Angela Barden, Neil Cox, Belinda Gray, Simon Stuart, Martin Sneary, Timothy Johnson, Julie Reay, Elizabeth McCance, and Georgina Mace

#### in association with experts in the

IUCN Species Survival Commission, World Conservation Monitoring Centre. and BirdLife International

> Guest Essays by Ulf Gärdenfors Alison Stattersfield

> > Foreword by George Rabb

























## Contributions to the IUCN/Species Survival Commission and the 1996 IUCN Red List of Threatened Animals

The Species Survival Commission gratefully recognizes its extensive network of volunteers who make production of the IUCN Red List possible. Those individuals who have contributed time and expertise are listed in the Acknowledgements. SSC also wishes to acknowledge those donors whose major financial contributions support a wide variety of SSC activities, as well as development and publication of the IUCN Red List.

The Sultanate of Oman established the Peter Scott IUCN/SSC Action Plan Fund in 1990. The Fund supports Action Plan development and implementation; to date, more than 80 grants have been made from the Fund to Specialist Groups. As a result, the Action Plan Program has progressed at an accelerated level and the network has grown and matured significantly. The SSC is grateful to the Sultanate of Oman for its confidence in and support for species conservation worldwide.

The Chicago Zoological Society (CZS) provides significant in-kind and cash support to the SSC, including grants for special projects, editorial and design services, staff secondments, and related support services. The President of CZS and Director of Brookfield Zoo, George B. Rabb, serves as the volunteer Chair of the SSC. The mission of CZS is to help people develop a sustainable and harmonious relationship with nature. The Zoo carries out its mission by informing and inspiring 2,000,000 annual visitors, serving as a refuge for species threatened with extinction, developing scientific approaches to manage species successfully in zoos and the wild, and working with other zoos, agencies, and protected areas around the world to conserve habitats and wildlife.

The National Wildlife Federation (NWF) makes a significant annual contribution to the SSC Conservation Communications Fund, in addition to grants for in situ conservation coordinated by the SSC. NWF is the largest non-governmental, non-profit conservation education and advocacy organization in the United States. NWF's emphasis is on helping individuals and organizations of all cultures, in the United States and abroad, to conserve wildlife and other natural resources and to protect the earth's environment to assure a peaceful, equitable, and sustainable future.

The Council of Agriculture (COA), Taiwan, has awarded major grants to the SSC's Wildlife Trade Program and Conservation Communications Program. This support has enabled SSC to continue its valuable technical advisory service to the Parties to CITES as well as to the larger global conservation community. Among other responsibilities, the COA is in charge of matters concerning the designation and management of nature reserves, conservation of wildlife and their habitats, conservation of natural landscapes, coordination of law enforcement efforts, as well as promotion of conservation education, research, and international cooperation.

The World Wide Fund for Nature (WWF) provides significant annual operating support to the SSC. WWF's contribution supports the SSC's minimal infrastructure and helps ensure that the voluntary network and Publications Program are adequately supported. WWF aims to conserve nature and ecological processes by: (1) preserving genetic, species, and ecosystem diversity; (2) ensuring that the use of renewable natural resources is sustainable both now and in the longer term; and (3) promoting actions to reduce pollution and the wasteful exploitation and consumption of resources and energy. WWF is one of the world's largest independent conservation organizations, with a network of National Organizations and Associates around the world and more than 5.2 million regular supporters. WWF continues to be known as World Wildlife Fund in Canada and in the United States of America.

The following organizations also played an important role in relation to the IUCN Red List:

Publication of the 1996 IUCN Red List of Threatened Animals was made possible by IUCN/SSC's co-publishing partner Conservation International (CI). Cl secured funds for the Red List production, including a generous grant from the Margot Marsh Biodiversity Foundation (US) and supported publication and distribution of the publication. Cl helps people improve their standard of living while conserving their valuable natural resources. CI develops and promotes models to conserve ecological "hotspots," threatened rain forests, and other ecosystems in Latin America, Africa, and Asia. To ensure lasting solutions to conservation challenges, these models integrate economic, cultural, and ecological factors, and are designed to strengthen local capacity for conservation.

The World Conservation Monitoring Centre (WCMC) is SSC's data management partner, and manages the database from which the IUCN Red List is generated, and has provided much of the information for this edition. WCMC, based in Cambridge, UK, is a joint-venture between the three partners in the World Conservation Strategy, and its successor, Caring for the Earth: IUCN, UNEP (the United Nations Environment Programme), and WWF. WCMC provides information services on the conservation and sustainable use of species and ecosystems and supports others in the development of their own information systems.

**BirdLife International** compiles and maintains the bird component of the IUCN Red List. BirdLife is a world-wide partnership of conservation organizations that seeks to conserve all wild bird species and their habitats. Through this, BirdLife helps protect the world's biological diversity and supports the sustainable use by humans of the world's natural resources. BirdLife is a national force in 58 countries around the world and represented in a further 26 nations.

The Nature Conservancy (TNC) supplied data for many of the North American species included in the IUCN Red List. TNC is an international non-governmental organization whose mission is to preserve the plants, animals, and ecological communities that represent the diversity of life on Earth. With more than 800,000 members, the Conservancy owns and manages over 1,600 preserves, the largest private system of nature sanctuaries in the world. Internationally, the Conservancy works to support in-country organizations and agencies that share its focus on the protection of biological diversity. The Conservancy has also helped establish a network of Natural Heritage Programs and Conservation Data Centers, based in state and national agencies and private organizations throughout the United States, Canada, and Latin America.

Digitized by the Internet Archive in 2010 with funding from UNEP-WCMC, Cambridge

## **Contents**

Page	Page
Foreword	Gnest Essays
George B. Rabb Intro 6	Application of IUCN Red List
Acknowledgements	Categories on a Regional Scale  Ulf Gärdenfors
ntroduction	Applying the New IUCN Threatened Species Categories
Organization of Information	Alison Stattersfield
nformation Sources and Quality	The 1996 IUCN Red List of Threatened Animals
The New IUCN Categories and Criteria	Index to Classes
	List 1. Threatened Species
Analysis Ionathan BaillieIntro 24	List 2. Lower Risk: conservation dependent 129
	List 3. Lower Risk: near threatened135
References	List 4. Extinct and Extinct in the Wild177
Data Tables	List 5. Data Deficient
Table 1. Status Category Summary	List 6. Subspecies and Populations219
for all Classes and Orders	List 7. Taxa Removed from the
Table 2. Status Category Summary by Major Taxonomic Group	1996 Red List241
Table 3. Threatened Species: Country	Index
Totals by Taxonomic Group	Annex
Table 4. Extinct, Threatened and Other Species: Country Totals by	Key to Sources
Status Category	

#### **Foreword**

The Red List of Threatened Animals is a warning flag, signalling for global attention to the perilous status of many species. In its approach, this Red List is different from all its predecessors and the existing Red Data books. It employs a more rigorous system for assessing degree of threat of extinction, a system reflecting current knowledge in population biology in relation to conservation concerns. This more objective approach should help focus attention on the causative factors behind the diminished geographic ranges, declining populations, and small numbers that characterize endangerment in many species.

The Red List is incomplete because of our ignorance of the vast majority of life forms on the planet, most of them invertebrates and other microfauna. Nevertheless, the status of the larger species covered by the Red List is indicative of the circumstances for many smaller species that occupy the same environments as the larger species. In this connection, a notable achievement in preparation of this edition of the Red List was review of all species of mammals. Thanks to this work and to the prior work of BirdLife International, two classes of vertebrates have now been assessed. It is of significance for conservation planning and action that the less vagile group, the mammals, has proportionately more species at risk of extinction than the birds.

The observations above reflect very considerable accomplishments. First, the development of the new system for categorizing threats was a formidable task. Led by Georgina Mace, the effort involved hundreds of consultations and much debate over several years before there was a product suitable for adoption by IUCN-The World Conservation Union. The conservation community is truly indebted to Dr. Mace and her many collaborators for their work.

Second, the application of the new system to species on prior lists and to other species was also a daunting undertaking. Many Specialist Groups of the Species Survival Commission and BirdLife International carried out this work. Jonathan Baillie gave crucial attention to coordination and instruction of this work, and his service deserves the gratitude of conservationists everywhere.

Most conservation actions are carried out in national contexts, and going forward, the new approach to categorizing conservation status needs to be adapted for use at the national level. The IUCN is encouraging the development of National Biodiversity Conservation Groups, and it is important that they be suitably equipped with cogent information in directing their efforts to effect conservation of endemic species.

As biological gauges of endangerment, the Red Lists of species should be considered as calls for attention to causal factors. The causes of endangerment range from habitat destruction and overharvesting to pollution and introduction of invasive species. Thoroughgoing review of the Red List in relation to these proximate causes may help focus relevant research, education, training, and policy development within the IUCN networks and the conservation community generally. In turn, such work can inform and inspire appropriate governmental and social actions to stem the loss of biological diversity illustrated so explicitly by this Red List. Looking ahead, such responsiveness will be obligatory if we are to deal at all adequately with global change phenomena that are impacting the long term survival prospects for ecosystems and their distinctive complements of species.

George B. Rabb SSC Chair

### **Acknowledgements**

The assistance of many people has been essential during the compilation of the 1996 IUCN Red List. In particular, we must acknowledge the many SSC Specialist Group chairs and other members, and the many other field scientists, who have provided data and opinions for this revision, usually in addition to already heavy workloads. We hope that we have not overlooked anyone in the list below, and trust that those who have made especially valuable contributions will not object to our alphabetical sequence.

Razeem Mazaln Abdullah, Alberto Abreu Grobois, M. Farid Absan, Arturo Acero, Donat Agosti, Alex Aguilar, Gustavo Aguirre, A. Alberts, G. Allen, Patricia Almada-Villela, R. Alonso, Giovanni Amori, Claes Andren, Christopher Andrews, Douglas Armstrong, Visit Arsaithamkul, Syoziro Asahina, Jose Marcio Ayres, Baccio Baccetti, Gary Backhouse, Robin Baird, John Baker, George Balazs, Michael Balke, Harvey Ballard Jr., Emilio Balleto, John Bannister, K.R. Beaman, Simon Bearder, John Behler, Denton Belk, Ben Bell, Diana Bell, Charles Bellamy, John Benzie, Ibrahim Beran, Kristin Berry, Vladimir Beshkov, Peter Best, Roger Bills, David Bilton, Zainuddin Bin Awang Lela, Vadim Birstein, Karen Bjorndal, D. Blair, Charles Blanch, William Bleisch, Quentin Bloxam, A.E. Bogan, Ramesh Boonratana, Eric Born, Philippe Bouchet, Ian Boyd, William Branch, Douglas Brandon-Jones, Matthew Braunwalder, Amie Bräutigam, M. Breuil, Warren Y. Brockelman, Daniel Brooks, Martin Brooks, D.S. Brown, Robert Brownell, B. Bruce, Andrew Burbridge, Kurt Bushlmann, James Buskirk, Tom Butynski, Nora Bynum, Des Callaghan, Ruben Callo, Merry Camhi, Claudio Campagna, Domingo Canales-Epinosa, John Cann, Emily Capuli, Eduardo Carrillo, C.M.S. Carrington, R.L. Carter, Stephen Casey, Fernando Cervantes, Anwaruddin Choudhury, Peter Christie, Ruth Chunge, Tim Clancy, D. Clark, Harold Cogger, Adelmar Coimbra-Filho, James Cokendolpher, G. Cole, Cristino Collado, David E. Collins, L. Compagno, Luis Contreras, Salvador Contreras-Balderas, J. Convers, S. Cook, Justin Cooke, Peter Copley, Keith Corbett, Liliana Cortes-Ortiz, R. von Cosel, Jackie Courtenay, John Coventry, R. Cowie, Colin Craig, Keith Crandall, Enrique Crespo, Deborah Crouse, Neil Cumberlidge, Claudio Cunazza, Indraneil Das, Charles Daugherty, G.S. Davis, Steve Dawson, Mark Day, Flavio de Barros Molina, Gustavo de Fonseca, Gerrit De Graaff, Idsen de Gusmao Camara, Daniel de Lamo, Roberto de Rocha e Silva, Thomas Defler, Bernard Devaux, Chris Dickman, H.K. Divekar,

Marydele Donnelly, lain Douglas-Hamilton, Craig Downer, Holly Dublin, Henri J. Dumont, Patrick Duncan, J. Dutton, Rod East, Harald Ehmann, Lucius Eldredge, Mark Eldridge, Keith Eltringham, K.C. Emberton, Sebastian Endrody-Younga, Carl Ernst, Joseph Erwin, Ardith A. Eudey, G. Evans, Michael Ewert, Neil Fairall, Garry Fellers, Christopher Field, Y. Finet, J. F. Fitzpatrick Jr., Tim Flannery, John Flux, Jack Fooden, Thomas Foose, Koyla Formozov, Nikolai Formozov, Garth Foster, Chuck Fowler, Sarah Fowler, Nat Frazer, A. Frias-Martin, Tony Friend, Agustin Fuentes, Liza Gadsby, Anh Galat, Gerard Galat, Nicholas Gales, Ray Gambell, Usha Ganguli-Lachungpa, S.K. Gangwere, Marion Garai, Gerald Garner, Dave Garshelis, Steve Gartlan, A. Gasgoigne, Annie Gautier-Hion, Anthony Gent, Sarah George, Arthur Georges, G. Gerber, Stella Giannoni, R. Gibson, Huw Giffiths, Joshua Ginsberg, Spartaco Gippoliti, Angela Glatston, Natalie Goodall, N. Goodyear, Surendra Goyal, Michael Green, Penelope Greenslade, Michael Griffin, O. Griffiths, Kurt Grossenbacher, Colin P. Groves, Kunkun Jaka Gurmaya, M. Haase, Celio Haddad, M. Hadfield, L. Hadway, David Hafner, Heather Hall, Matti Hamalainen, Michelle Hamer, Sandy Harcourt, James Harding, John Hare, Tero Harkonen, David Harrison, John Harwood, Julie Hawkins, W.K. Hayes, Sun Hean, Larry Heaney, Simon Hedges, Mads Peter Heide-Jorgensen, Joel Heinen, Eero Helle, J. Heller, R. Henderson, Lars Hendrich, Martin Henzl, Alejandro Hernandez-Yasez, David Hill, Craig Hilton-Taylor, Rod Hitchmough, Horton Hobbs III, Domingo Hoces, John Holsinger, Paul Horner, J. Horrocks, M. Hounsome, Darryl Houston, Chia Chi Hsiung, Elodie Hudson, Gene Huntsman, Mark Hutchinson, Anthony Hutson, M. Ibanez, Thomas Illiffe, Amar Inamdar, Prayuth Intarapanich, Augustin Iriarte W, John Iverson, Nina G. Jablonski, Dale Jackson, Peter D. Jackson, Peter F.R. Jackson, Peter Jarman, Thomas Jefferson, Raymond Jezerinac, Xing-Bao Jin, Andrew Johns, Chris Johnson, Ken Johnson, Naris Kaewsalabnil, Zhou Kaiya, Sumate Kamolnorranath, Kadzo Kangwana, Toshio Kasuya, Hidehiro Kato, Todd Katzner, Les Kaufman, V. Kessner, Le Vu Khoi, Catri Khoohathapharak, Bastiaan Kiauta, R.N. Kilburn, Steven Kingswood, Margaret Kinnaird, Carl Kinze, R. Craig Kirkpatrick, Devra Kleiman, David Klein, Hans Klingel, Ann K. Kohihaas, Wichit Kongkham, Karen Kool, Adriaan Kortlandt, Zoltan Korzos, Maurice Kottelat, Gerald Kuchling, Ajith Kumar, Padma Kumari de Silva, Frank Kurczewski, Sergius Kuzmin,

Michael Lambert, Ernst Lang, Tom Langton, P. Last, Andrew Laurie, David Lavigne, Richard Laws, Kevin Lazarus, James Lazell, Nigel Leader-Williams, Steve Leatherwood, Anthony Lee, Phyllis Lee, Charlie Leelasiri, Lynn Lefebvre, Jean-Marc Lernould, Jean Lescure, Sanan Liangpaiboon, Colin Limpus, Malan Lindeque, Bounchanh Liphoung, Lois K. Lippold, Miguel Lizana, Michael Lock, Chainarong Lohachit, Paul Loiselle, Lloyd Lowry, Geoff Lundie-Jenkins, Dan Lunney, Yiqing Ma, Alistair MacDonald, David Macdonald, Angelo Machado, Akihiro Mae, Alejandro Maeda-Martinez, Bruce Male, David Mallon, M.C.D. Mansur, Neca Marcovaldi, Dimitris Margaritoulis, A.L. Markezich, Miriam Marmontel, Helene Marsh, Koen Martens, Roderic Mast, Larry Master, Yolanda Matamoros, Sharon Matola, Stephanie Maxwell, Mary June Maypa, Don McAllister, Kelly McAllister, Elizabeth McCance, Andrew McCarthy, William McCord, Keith McDonald, R.M. McDowall, Roger McManus, David Mech, Marcus Meier, Peter Menkhorst, Anne Meylan, Peter Meylan, Simon Mickleburgh, Phil Miller, Gus Mills, Joe Mitchell, Joseph Mitchell, Russell Mittermeier, Patricia Moehlman, Don Moll, Edward Moll, Maggie Moonie-Seus, Jim Moore, Norman Moore, Daniel Morris, Keith Morris, Jeanne Mortimer, Cynthia Moss, Johanna Motta-Gill, Teresa Mulliken, Graziella Mura, Jack Musick, M. Mylonas, Tilo Nadler, F. Naggs, Bernabas Nagy, D. Nellis, Gertrud Neumann-Denzau, T.R. New, Don Newman, Carsten Niemitz, Goran Nilson, Toshisada Nishida, Steve Njumbe, Peter Novellie, Kristin Nowell, Eduardo Nunez, Felix Nunez, Ann Oakenfull, John F. Oates, R.A. Odum, Ricardo Ojeda, Maria Elisa Oliveira, William Oliver, Robert Olivier, Thaworn Orasoon, J. Ottenwalder, Su Su Oung, S. Palazzi, Buntawan Pamoke, Felipe Pascual, Dennis Paulson, Junaidi Payne, Paul Pearce-Kelly, David Pearson, Oliver Pearson, A. Perera, A.M. Perez, William Perrin, R. Pethiyagoda, Georgi Petrov Peshev, Bernie Peyton, William Pflieger, Richard Podloucky, Cathryn Poff, B. Pokryseko, W. Ponder, Ishwar Prakash, Theerapat Prayurasiddhi, R.C. Preece, Peter Pritchard, Zdzislaw Pucek, Silvia Puig, Andre Punt, Paul Racey, David Ragge, Graeme Ramsay, Nipat Rattanapan, Nancy Rayner, Bruce Read, James Reddell, Kent Redford, Randall Reeves, Janet Reid, Peter Reijnders, Dave Charles Rentz, Julio Reyes, Vernon Reynolds, Anders Rhodin, Ignacio Ribera, Enrique Richard, Philip Richardson, T. Ripkin, Callum Roberts, Phillip Robinson, Terence Robinson, Henry Robinson, Ernesto Rodriguez-Luna, Francisco Romero, Fernando Rosas, James Perran Ross, B. Roth, Rob Roughley, David Rounsevell, Richard Rowe, Mary Rowen, Roger Roy, Anthony Rylands, Sergio Saba, Jordi Sabater-Pi, Yvonne

Sadovy, Carl Safina, David Saltz, Michael Samways, Kanchai Sanwong, Daniel Sarasqueta, Carel P. Van Schaik, P.J. Schembri, Mitchel Schiewe, Duane Schlitter, Eberhard Schmidt, Frederick Schueller, Helga Schulze, Norman Scott, Mary Barbara Seddon, John Seebeck, Michael Seidel, Michael Sergeev, Lester Seri, Juan Carlos Serio-Silva, Chris Servheen, David Shackleton, Nita Shah, Peter Shaughnessy, Glenn Shea, Greg Sherley, Jeff Short, Johann Sigurjonsson, Claudio Sillero-Zubiri, Gilberto Silva-Lopez, Marcus Simons, Apidet Singhaseni, Tero Sipilla, Paul Skelton, Boris Sket, S. Slack-Smith, Elisabeth Slooten, Andrew Smith, Brian Smith, Laurie Smith, Jack Sobel, A. Solem, Ramon Soriguer, Nicolas Soto, Zandi Spuris, Sompoad Srikosamatara, J. Stanisic, F. Starmühlner, J. Steffek, Sally Stephens. Melanie Stiassny, Ian Stirling, David Stone, Gregory Stone, Karen Strier, Anton Stumpel, Franz Suchentrunk, Ken Sugimura, Vivake Sukead, Channarong Sukthon, Raman Sukumar, Yant Sukwonge, Sidney W. Sunkle, Jatna Supriatna, P. Tattersfield, Christopher Taylor, Mitchell Taylor, Ricky Taylor, Andrei Tchabovsky, Geza Teleki, Jo Thompson, Paul Thompson, John Thorbjarnarson, Apichart Tirawatana, P. Tolson, K. Tomiyania, David Towns, Fritz Trillmich, Wancahi Tunwattana, Caroline Tutin, B. K. Tyagi, Michael Tyler, Martin Tyson, Shun-Ichi Ueno, Yuji Uozumi, Yongchai Utara, Claudio Valladares-Padua, Victor Valverde, Erik van der Straeten, Peter Paul van Dijk, Nico van Strien, Jan van Tol, Dick Vane-Wright, R. Varman, Alejandro Velazquez, Fernando Videla, Bibiana Vila, Maria Lilian Villalba, Amanda Vincent, Valeriy Vladimirov, Richard Vogt, Rob Wager, H. Wai, Simon Wakefield, Sawai Wanghongsa, Melvin Warren Jr., Robert Webb, Vern Weitzel, Susan Wells, Christen Wemmer, Tony Whitaker, Anthony Whitten, Ian Whyte, Wisid Wichasilpa, Mary Wicksten, T. Wiewandt, Oystein Wiig, Stuart Williams, Liz Williamson, Khin Than Win, D. Wingate, A.J. de Winter, John Winter, Roland Wirth, John Woinarski, Grace Wong-Reyes, Elizabeth Wood, Charles Woods, Jack Woody, Pat Woolley, Richard Wrangham, W. Wuster, Nuan Thong Xavonxay, Zhang Yongzu, Waltraut Zimmermann, G. Zorzi, George Zug, Gabriel Zunino, and C.G. van Zyll de Jong.

Although it is always dangerous to draw attention to particular names from such a list, special mention must be made of the extraordinary effort made by the SSC Mollusc Specialist Group, under the leadership of Mary Seddon and Philippe Bouchet, which evaluated a huge number of species for inclusion in the 1996 IUCN Red List of Threatened Animals.

The data on birds are taken from BirdLife International's 1994 publication *Birds to Watch 2*, which is

the official source for birds on the IUCN Red List. We would like to thank Nigel Collar and Alison Stattersfield for their assistance in making the bird data available. Data for a number of species of North American reptiles, amphibians, fishes, and invertebrates are generously provided by the Nature Conservancy, and we thank Bruce Stein and Jeff Lerner for their help. Data on marine fishes were provided through a workshop supported by the Institute of Zoology (UK) and the World Wide Fund for Nature, and special thanks are due to Elodie Hudson, Georgina Mace, and Mike Sutton for making this possible. Additional thanks goes to Maurice Kottelat for his advice on Eurasian fishes. We also would like to thank Flora and Fauna International for supporting Simon Mickleburgh and Mark Day in their contributions to the Red List.

Particular thanks are due to Ulf Gärdenfors and Alison Stattersfield for writing the Guest Essays. Ulf's essay introduces the process that has now started to develop guidelines for the application of the new IUCN Red List categories at regional and national levels. Alison's essay highlights some of the lessons learned in using the new categories in the compilation of *Birds to Watch* 2.

Particular mention must be made of the extraordinary amount of work undertaken by the World Conservation Monitoring Centre in support of the 1996 IUCN Red List of Threatened Animals. Research, fact-checking, and data entry were carried out by Angela Barden, Neil Cox. and Belinda Gray. Electronic data merges were undertaken by Martin Sneary, who also designed and implemented changes to the database, and produced output files for data tables and taxonomic lists. Julie Reay supervised the final production of tables and lists. Terry Hart was responsible for the final production of the tables and lists to produce the camera-ready copy. Overall quality control and coordination was provided by Brian Groombridge. Tim Johnson and Brian Groombridge were the project managers. WCMC generously supported this project over and above the level of funding provided by IUCN, without which this edition could not be produced.

The task of compiling the 1996 IUCN Red List of Threatened Animals presented particular challenges, resulting from the adoption of the new IUCN Red List categories in November 1994. This made it impossible to carry listings forward from the 1994 IUCN Red List.

Jonathan Baillie took the responsibility of assisting the SSC Specialist Groups and other experts to use the new system, and apply it to thousands of species. Without Jonathan's assistance, the first ever evaluation of all mammal species for their threatened status would not have been completed in time for this edition. Jonathan developed a guide on how to use the new categories and criteria, which was widely used by SSC members. He was also responsible for writing most of the Introduction and Analysis sections of the 1996 IUCN Red List of Threatened Animals. Brian Groombridge provided considerable assistance with the introductory section and, in particular, was responsible for the Organization of Information, Information Sources and Quality, and Data Table sections. Mariano Gimenez Dixon played a major role in helping to evaluate a number of the lesser-known species under the new system, and assisted Jonathan in providing support and advice to SSC members. Georgina Mace was a constant source of wisdom and advice throughout the process, and provided valuable editorial comments. Simon Stuart was the IUCN project manager, and served as overall editor of the introductory sections.

Production of the camera-ready copy at the offices of the Chicago Zoological Society was carried out by Diane Cavalieri. Elizabeth McCance oversaw the final compilation, and Susan Tressler also assisted during the final stages of production.

Production of the 1996 IUCN Red List of Threatened Animals would not have been possible without the ongoing support of the long-term donors to the IUCN Species Survival Commission: the Sultanate of Oman (which established the Peter Scott IUCN/SSC Action Plan Fund); the Chicago Zoological Society; the National Wildlife Federation; the Council of Agriculture, Taiwan; and the World Wide Fund for Nature. English Nature has also provided financial support to assist in the publication of this Red List. In particular, publication of the 1996 IUCN Red List was made possible by IUCN/SSC's co-publishing partner, Conservation International. Conservation International secured funds from the Margot Marsh Biodiversity Foundation (US) and supported the publication and distribution of the publication. Particular thanks are due to Russ Mittermeier and Jorgen Thomsen of Conservation International for making all this possible.

#### Introduction

For more than thirty years, the Species Survival Commission (SSC) has been assessing the conservation status of species and subspecies on a global scale in order to highlight taxa threatened with extinction, and therefore promote their conservation. Although today we are operating in a very different political, economic, social, and ecological world from that of the first IUCN Red Data Book, the SSC remains firmly committed to providing the world with the most objective, scientifically-based information on the current status of globally threatened biodiversity. As species and subspecies are the bearers of genetic diversity and the building blocks of ecosystems, information on their conservation status and distribution provides the foundation for making informed decisions about preserving biodiversity at local to global levels.

#### Goals

The goals of the 1996 IUCN Red List of Threatened Animals are to:

- Provide scientifically-based information on the status of species and subspecies at a global level
- Draw attention to the magnitude and importance of threatened biodiversity
- Influence national and international policy, and decision making
- Provide information to guide actions to conserve biological diversity

## Improving the Red List as a Conservation Tool

We have introduced several innovations which have enhanced the effectiveness of the 1996 IUCN Red List as a conservation tool:

- At the species level, the conservation status of all vertebrates and the majority of invertebrates listed in the 1994 Red List has been re-assessed:
- For the first time, all mammal species have been assessed, in addition to many other species that had not previously been evaluated;
- We have adopted and applied a more objective system for classifying conservation status, that allows comparisons to be made across species in assessing likelihood of extinction;

- The information is presented in a more user-friendly manner so that it may be used by a much larger and varied audience; and
- We have tried to make the information more accessible as it is posted on the World Wide Web, with links to other threatened biodiversity information sources.

With the help of a network of more than 6,000 SSC Specialist Group members, and data from BirdLife International, the World Conservation Monitoring Centre, and The Nature Conservancy, the 1996 IUCN Red List of Threatened Animals is the most comprehensive inventory ever of threatened species and subspecies on a global scale. The efforts of the large network of volunteers and partner organizations have resulted in the recognition of the 5,205 threatened taxa listed in this book

The conservation status of every mammal species in the world is assessed for the first time in the 1996 IUCN Red List. The only other major taxonomic group that has been comprehensively evaluated is birds (Collar *et al.* 1994). Assessing every species in these taxonomic groups represents a major milestone in conservation, enabling us to determine clearly the overall status of mammals and birds, and to continue to monitor the trends within these higher-taxon groups.

Although determining the conservation status of all birds and mammals is a great step forward in conservation, these two classes represent about 30% of vertebrates and only 0.8% of all named species. Within the next five to ten years, we hope to have all known higher vertebrates and freshwater fishes completely assessed. Unfortunately, given lack of financial resources, and the sheer magnitude of the numbers of lower vertebrate and invertebrate species, it will probably be a long time before these taxa receive comprehensive conservation assessments. Furthermore, there are currently about 1.5 to 1.8 million named species, but it is estimated that the actual number of species in the world ranges from 5 to 10 million (May et al. 1995). If this prediction is correct, then thousands to millions of species may be missing from the Red List because they have not yet been discovered or described. Nevertheless, despite these difficulties, the number of invertebrate and fish species included within the Red List has risen sharply in the last three published editions.

To improve the quality and usefulness of the information in the Red List, we have used the new IUCN categories and criteria, approved by IUCN Council in 1994. This system improves the objectivity of the listing process by providing quantitative criteria that define each category of threat (Critically Endangered, Endangered, and Vulnerable). It also requires specialists who provide assessments to give a reason for the listing of each species or subspecies in a particular threat category. Providing specific reasons for listing: (1) improves the accountability of the system; (2) provides information that may lend insight into processes driving extinction for a specific species, taxonomic groups, or taxa in a particular region; and (3) provides the basis for systematically monitoring changes in status over time. Details of the new system can be found in the section entitled The New IUCN Categories and Criteria, and also in Annex 2 at the end of this publication.

The Red List was traditionally written for a scientific andience (Scott et al. 1987), but as the imperiled status of biological diversity has become increasingly evident, the general public and policy makers have taken a much stronger interest in the growing list of threatened taxa. We have changed the format of the publication to appeal to a much wider audience while retaining scientific content. Where possible, common names have been included for all species and subspecies.

The 1996 IUCN Red List of Threatened Animals is now on the World Wide Web at (http://www.wcmc. org.uk/data/database/rl\_anml\_combo.html). This allows any person with Web access to use the database to obtain information such as:

- What percent of known and assessed species are threatened?
- Which species and subspecies are the most threatened?
- Which taxonomic groups are at the greatest risk of extinction?
- · Where are the most threatened species located?

Currently, links are being developed to allow direct access to relevant SSC Specialist Group Action Plans or Specialist Group home pages. IUCN will be developing Web connections between the Red List and other biodiversity information sources. This will enhance the value of the Red List as a starting point for exploration of conservation options, ranging from the genetic to the ecosystem level.

## Organization of Information

The 1994 IUCN Red List of Threatened Animals was a major advance on its predecessors in clarity of layout and amount of information presented on each species. This is maintained in 1996, and the lists further reflect the refinement built into the revised system of categories.

There are eight categories in the new system. All taxa within these categories have an entry in the seven lists below except those in the Not Evaluated category (NE) and those in the Lower Risk subcategory of "least concern" (LR:lc). All assessments (except the small number of geographically isolated populations in List 6, which are not recognized taxonomically) are of the taxon as a whole, i.e. indicate the global risk of extinction.

The first priority in compiling this present edition of the Red List was to assess all known mammal species; the second was to re-assess all other vertebrates in the 1994 Red List; the third was to cover the invertebrate groups in the 1994 Red List for which an active IUCN Specialist Group exists. These goals have been achieved. It can be assumed therefore that any bird or mammal species (unless described too recently to have been evaluated, or not generally accepted as a full species) that is not in one of the lists in this publication falls within the "least concern" division of the Lower Risk category. The fourth priority was to deal with remaining invertebrates; relatively few of these have been assessed.

#### **Contents of Taxonomic Lists**

#### List 1

#### **Threatened Species**

This list includes all the full species categorized at global level as either Critically Endangered (CR), Endangered (EN), or Vulnerable (VU). Only taxa within any of these three categories are collectively termed "threatened", and this list is the current central catalogue of animal species identified as globally threatened under the new category system.

#### List 2

#### Lower Risk: conservation dependent

Species for which sufficient data exist for an assessment to be made, but which are not in a threatened category (List 1) or extinct (List 4) are Lower Risk. This has three sub-divisions. Of these, Lower Risk: conservation dependent (LR:cd) includes species that are the subject of a targeted conservation program, the ending of which would result in the taxon moving into a category of threat within five years.

#### List 3

#### Lower Risk: near threatened

This includes species in the "near threatened" subcategory of the Lower Risk category (LR:nt). Taxa in this subcategory are "near threatened" in the sense of being close to the threshold of the Vulnerable category.

#### List 4

#### Extinct and Extinct in the Wild

The second list in the 1994 Red List was a compilation of species categorized by IUCN as extinct or probably extinct in the wild, and a number of species that had not been categorized by IUCN but which were known to have become extinct since around 1600 AD. That previous compilation is the basis for this list, which includes two distinct categories in the revised system, Extinct (EX) and Extinct in the Wild (EW). This list reflects some movement of species between extinct and threatened categories as a result of new information or interpretation.

#### List 5

#### **Data Deficient**

This category includes species that lack the data needed to make an assessment of risk possible. Taxa in this category differ from those in the Not Evaluated category in that the question of data availability has been considered in the former but has not yet been considered in the latter.

#### List 6

#### **Subspecies and Populations**

This includes all subspecies that were listed in 1994 and which have been reassessed for 1996. All categories are included here, except Lower Risk: least concern. In most instances subspecies are only listed if the full species of which they are a component has also been evaluated. For the first time, a number of geographically isolated intraspecific populations have also been listed where a special conservation need has been identified. In List 6 the letters "cd" and "nt" in place of the criteria shown in List 1 indicate, respectively, the "conservation dependent" and "near threatened" subcategories of Lower Risk.

#### List 7

#### Taxa Removed from the 1996 Red List

Of the taxa that appeared in previous Red Lists, some have been evaluated using the new categories and some have not. In the former group, many have been assessed as Lower Risk: least concern (LR:lc). Taxa in this subcategory are not in general listed in this publication, but

an exception is made for taxa that were formerly listed in order to highlight the change in status. These appear in the first part of List 7. The names of taxa previously listed but not evaluated at the time of going to press appear in the second part of List 7. The second part of List 7 also contains a small number of as yet undescribed species for which full details have not been provided (see below) and which therefore have not been included in the main lists. It is possible that unresolved taxonomic problems may have led to some duplication of entities in List 7 and Lists 1-6.

We do not list any of the species formerly listed in the Commercially Threatened category (List 5 in the 1994 Red List). This category was a form of threat classification, not a risk assessment, and so is not recognized in the new system. Of the species formerly listed in this category, none has been assessed for the 1996 Red List, except the single vertebrate (*Macaca nemestrina*, now VU). We do not list any of the genera and other higher taxa formerly listed in List 3 of the 1994 Red List. Many of the Lake Victoria cichlid fishes have now been assessed at species level and appear in appropriate sections of the present Red List; none of the other groups has yet been assessed at species level. The new category system is valid only for species and subspecies, not higher taxa.

#### **Notes on Species Category Lists**

Each standard entry in Lists 1, 4 and 6 has the following format:

- · scientific name
- common name (where available)
- category abbreviation (in bold), source of category assessment (in superscript, see key in Annex 1), criterion or criteria (for threatened categories only)
- · range countries

Lists 2, 3 and 5 each contain species in a single category; the category in these cases appears in the title header for the list (left-hand page) rather than in the species entry itself. Some of the stocks and populations included with subspecies in List 6 have a distinguishing geographic or common name in an additional line under the scientific or common name.

We give the criteria for the highest category to which the species can be assigned but not for any lower category that might also apply (for birds this corresponds to the criterion or criteria printed in bold in *Birds to Watch 2*).

A small number of marine fishes in List 1 and List 6 have the letter C in parentheses after the species name. This indicates that a caveat formulated at the workshop

on categorizing marine fishes (Hudson and Mace 1996) applies in particular to these populations. The text of this caveat is reproduced in the following paragraph. A note at the start of the fish section of List 1 stresses the preliminary nature of the marine fish assessments in general.

The criteria (A-D) provide relative assessments of trends in the population status of species across many life forms. However, it is recognized that these criteria do not always lead to equally robust assessments of extinction risk, which depend upon the life history of the species. The quantitative criterion (A1a, b, d) for the threatened categories may not be appropriate for assessing the risk of extinction for some species, particularly those with high reproductive potential, fast growth and broad geographic ranges. Many of these species have high potential for population maintenance under high levels of mortality, and such species might form the basis for fisheries.

Except where a species is known only by fossil material, it is typically an accumulation of negative evidence, i.e. repeated failure to find a species, that leads to the conclusion that extinction has occurred. Several species once thought recently extinct have been rediscovered and doubtless others will be in future; conversely it is certain that many species will have become extinct unnoticed and sometimes undescribed. The extinct species list is thus liable to change significantly over time because of these factors, and also because of changes in species level taxonomy.

#### Distribution Information

Distribution is recorded in terms of country names. Unless geographically very remote from each other, islands and other territories are included with the parent country. In the case of species that only inhabit islands significantly distant from the mainland, the island name is given in parentheses (e.g. Spain (Canary Is)).

With regard to marine species, country records are provided only for strictly coastal or inshore (or riverine) cetaceans, and for otherwise marine species that return to land to breed or nest (note that species without a country range in the database from which the Red List is generated are not represented in the data tables). For some marine species, and most strictly marine species we show generalized ranges in terms of FAO Fishery Areas, indicated by square brackets (e.g. [Atlantic (northeast, northwest), Indian Ocean (eastern)]). For many freshwater species, usually those restricted to a single water sys-

tem, freshwater ranges are also indicated by square brackets. Rivers and lakes are distinguished by R. and L. respectively (e.g. [R. Cetina], [L. Toba]). In a few instances, a second river name (e.g. [R. Danube (R. Tisla)]) indicates a section of the drainage in which the species occurs.

In most cases where populations are known to have been introduced or reintroduced to a country, this is indicated by [int] or [re-int] after the country name in the distribution text. Similarly, where populations are known or suspected to have been extirpated from a country, this is indicated by (ex) or (ex?).

Geopolitical events during recent years may have led to some inconsistency or errors in the distribution information provided. Within reasonable limits every effort has been made to determine which of the new nations that were part of the former Czechoslovakia, Yugoslavia and USSR support species previously attributed to the larger unit. Thus, any record for "Yugoslavia" should refer to the current Serbia-Montenegro, but might in some cases refer to the former federation.

In List 6, containing subspecies and a number of stocks and other geographically isolated populations, the latter are indicated by (S) after the species name, and unless otherwise clear, the population or stock is indicated on the line under the species name (e.g. Acipenser gueldenstaedti (S), (Caspian Sea stock)).

## Information Sources and Quality

#### Conservation Information

In the threatened species lists, the superscript number following the category abbreviation keys to the list of sources (Annex 1); note that this indicates the person or group responsible for the category and criteria designated, not usually the source of any other data represented in that entry. When the assessment is attributed to more than one person, names are in alphabetical order.

Where an active SSC Specialist Group exists for a taxon, that group has in general undertaken the status assessment and provided the resulting category and specification of criteria. In some cases these assessments have been the product of group discussion, but often they represent the judgement of individual Specialist Group members. Gaps in Specialist Group coverage of vertebrates have been filled by SSC staff (Jonathan Baillie: most mammals, Mariano Gimenez Dixon: North American "lower" vertebrates) and WCMC Species Unit staff (several groups, including Eurasian fishes). North American assessments were based in most cases on data provided by The Nature Conservancy (TNC). The assessment of Australian amphibians was based on data provided by the Australian Nature Conservation Agency (ANCA). The final assessments of these species to be made by ANCA may differ from those provided here.

The information from TNC was provided as printouts from their databases. TNC has its own Biodiversity Element Ranking System (see Master 1991) which is based on very similar information requirements to those used in assigning the new IUCN Red List categories. As a result, it was possible to apply the IUCN categories, using species-related data supplied by TNC.

All categorizations of bird taxa have been provided by BirdLife International, and reflect the contents of Birds to Watch 2 (Collar et al. 1994). This is the world list of threatened birds, and includes lists of Data Deficient and other species not in the threatened category group. BirdLife International originally employed an earlier version of the revised category system than that finally approved by IUCN Council. Subsequently, "conservation dependent" has been subsumed in the Lower Risk category, and there is an additional qualifier for the A (Declining Populations) criterion; these changes have been made in this present list. A small number of Specialist Groups covering birds have later made further assessments of species using the final version of the new category system, but it was decided in the interests of standardization to maintain the BirdLife International

assessments. Some of the later assessments are incorporated in recently published Action Plans.

While nominally all mammal species (i.e. those listed in Wilson and Reeder, 1993, but not all of those subsequently described) have now been assessed, the assessment process has been based on relatively poor or sparse information in the case of many rodents, insectivores, and microbats. The need for better data is most pressing among these groups that are generally small or very small in body size, but very rich in species.

Future editions of the Red List will aim, higher-taxon group by higher-taxon group, to produce complete assessments of all reptiles, amphibians and fishes.

#### Nomenclature

We have followed standard world checklists whenever possible in order to promote nomenclatural stability. In a very few instances a Specialist Group has used alternative systematic opinion.

The following paragraphs note the main taxonomic sources used. We have adopted the names of phyla used by Margulis and Schwartz (1988), but list them in reverse sequence; classes are listed in alphabetical sequence within phyla (phylum names do not appear in the lists). The world list of amphibians edited by Frost (1985) and revised by Duellman (1993) lists orders, families, genera, and species in nested alphabetical sequence. There is much to commend this practice, particularly where no one system is familiar to all users, and we have treated reptiles and invertebrates in this way.

#### Mammals

The names and sequence of orders and families, and the species content of families follows Wilson and Reeder (1993). Genera and species are alphabetical within families. Species nomenclature generally also follows this source, except when a Specialist Group has expressed a very strong preference for another system, or has used nomenclature different from Wilson and Reeder and we have been unable to resolve consequent ambiguities about the population content of species and their distribution. Principal departures from Wilson and Reeder, relatively few in number, are found in the primates and bovids.

#### Birds

Nomenclature for genera and species generally follows Sibley and Monroe (1990, 1993). Solely to maintain uniformity with *Birds to Watch 2*, we use the names and sequence of orders and families, and the species content of families of Morony, Bock, and Farrand (1975).

#### Reptiles

Turtles and tortoises generally follow Iverson (1992); crocodilians follow King and Burke (1989); tuatara systematics are after Daugherty *et al.* (1990). Names in common use, including by Specialist Groups or in national sources, have been employed for other groups of reptiles: there is as yet no standard world species checklist for lizards or snakes.

#### **Amphibians**

Nomenclature and sequence consistently follow Frost (1985) as updated by Duellman (1993).

#### **Fishes**

The names and sequence of orders and families, and the species content of families follows Eschmeyer (1990). Genera and species are alphabetical within families. Names in common use, including by Specialist Groups or in national sources, have been employed at the species level: there is as yet no published standard world species checklist for fishes. We have changed some family names given in contributions from the SSC Freshwater Fish Specialist Group in order to conform with the taxonomy of Eschmeyer.

#### Invertebrates

Parker (1982) has generally been followed for nomenclature at class, order, and family level and above. There is a lack of widely accepted class-level checklists for invertebrates and in the absence of such sources no attempt has been made to standardize names submitted for inclusion.

#### **Undescribed Species**

We have followed a policy developed by SSC regarding listing of undescribed species. These can be accepted only under the following conditions:

- There is general agreement that the undescribed taxon is in fact a species.
- · Clear distribution information can be provided.
- Listing the undescribed species will potentially aid in its conservation.
- Specimen reference numbers are provided by which the species can be traced without confusion.
- The museum or other institution holding the collection and the individual responsible for the proposal can be identified.
- · Whenever possible a common name can be added.

Undescribed species are represented in the lists by the generic name and the abbreviation "sp." Details of specimen numbers and institution are available on request from WCMC.

## The New IUCN Categories and Criteria

After a long process of review and consultation, the new IUCN categories and criteria were adopted by the IUCN Council on November 30, 1994. This system was developed to improve the objectivity of classifying the conservation status of species, subspecies, and populations on a global scale and to provide more useful information about the status of taxa.

#### Why a New System?

To create a meaningful list of threatened species, those applying the classification system must have a common understanding of the categories of threat. The definitions for the former IUCN threatened species categories were largely subjective. Thus, different individuals could obtain widely different assessments for the same taxon, even using the same information. This was not a major problem in the 1960s and 1970s, because there was one person responsible for determining the status of all the species in the Red Data Books. Thus the system was consistently applied despite the vague threatened category definitions (Collar 1992). However, since the early 1980s, the SSC has expanded greatly, and the responsibility of assessing the conservation status of species shifted to the numerous SSC Specialist Groups. As more people became involved in the assessment process and used their own interpretations of the IUCN categories, it became increasingly evident that a less subjective and more accountable system was needed.

Devising an objective system is a very challenging task, because there is no clear line that separates threatened and non-threatened species. There is in fact a continuum, and we have to choose appropriate points at which to divide one group from another. Discussions of a new approach for assessing extinction risk was a major theme at the symposium, *The Road to Extinction*, held by the SSC in 1984; however, no single approach was agreed upon (Fitter and Fitter 1987). Again, in 1989, the SSC Steering Committee requested the development of a new approach that would provide the conservation community with useful objective information for conservation planning.

Mace and Lande (1991) presented the first outline for a new system in a paper which recommended categorizing species by their probability of extinction over a given period of time. They suggested that numerical thresholds could be set for each category of threat, and made specific proposals appropriate for higher vertebrates. Immediately after the publication of the 1991 version of the system, it was tested by a number of the specialist groups on many different taxa through a series of Conservation Assessment and Management Planning (CAMP) workshops, organized by the SSC Conservation Breeding Specialist Group (CBSG). Following an extensive review and consultation process, including a major international workshop, Mace et al. (1992) proposed a major revision of the 1991 paper, adapting the criteria and their quantitative thresholds for each of the categories of threat to apply to all species. Also, the SSC initiated a process of broad consultation to solicit comments and recommendations from SSC members, other 1UCN Commissions, 1UCN member organizations and governments, and other experts. This process of consultation led to two more revisions of the system before it was officially adopted by the IUCN Council in November of 1994.

The IUCN Red List categories and criteria are applicable to all taxonomic groups, except micro-organisms. By providing a clear quantitative framework for the categories of threat, the objectivity of the listing process has been increased. Enhancing the objective nature of the system is intended to improve the consistency in its application. This facilitates the comparison of the status of species and subspecies from very different communities and backgrounds. The new system has been applied to every species and subspecies in the 1996 IUCN Red List of Threatened Animals. For further information on how the new IUCN categories and criteria have been applied to a broad range of taxa, refer to Collar et al. 1994 and Species 24 and 25. Several groups are now working on guidelines for the application of the Red List categories and criteria to specific groups of taxa.

## Summary of the IUCN Categories and Criteria

Every species and subspecies evaluated with the new system is classified into one of the eight categories. Three of the eight categories are known as the categories of threat: Critically Endangered, Endangered, and Vulnerable. Five criteria, denoted by the letters A-E, as well as subcriteria, denoted by numbers and lower case letters define the categories of threat. While this may appear somewhat confusing at first, the following summary should help to outline clearly the exact roles of the categories, criteria and subcriteria. For more detailed information please refer to the Annex at the end of this publication entitled *IUCN Red List Categories*.

#### The Categories

There are eight well-defined categories (refer to the Annex for full details) that enable the classification of almost every species or subspecies in the world. The eight categories are illustrated in bold in Figure 1.

Extinct means that there is no reasonable doubt that the last individual has died. Extinct in the Wild means that the species has been extirpated from its natural habitat. The definition for Extinct in the Wild (see the Annex at the end of this publication) gives guidance on the circumstances in which it is possible to pronounce a wild species extinct. Critically Endangered, Endangered, Vulnerable (the categories of threat) each have quantitative criteria that broadly reflect different levels of risk of extinction. The details of these criteria are discussed at greater length in a separate section to follow. The Lower Risk category has three subcategories:

- Conservation dependent: taxa that do not qualify for the Vulnerable category only because of speciesspecific or habitat-specific conservation efforts, the cessation of which would result in the taxon qualifying for one of the threatened categories within a period of five years
- Near threatened: taxa that are not Conservation Dependent, but almost qualify for one of the Vulnerable criteria

 Least concern: taxa that are not in any immediate danger of extinction.

These subcategories are intended to support the monitoring of species' status, and can indicate particularly significant circumstances, such as species close to threatened status and those dependent on continuing conservation actions.

The remaining two categories do not reflect the conservation status of taxa. The Data Deficient category highlights taxa for which information to make a sound conservation assessment is lacking. The category Not Evaluated applies to taxa that have not yet been assessed with the new system.

#### The Categories in Use

When the categories are applied to an individual species or subspecies, they provide a snapshot in time of the taxon's conservation status or indicate that more information is needed. Comparison of assessments over time will identify trends in the conservation status of a particular taxon.

The categories provide a framework that allows for analysis of the conservation status between widely different higher taxonomic units such as Family Felidae, Order Diptera, or Class Reptilia. Also, comparing the classification of taxonomic groups over time provides informa-

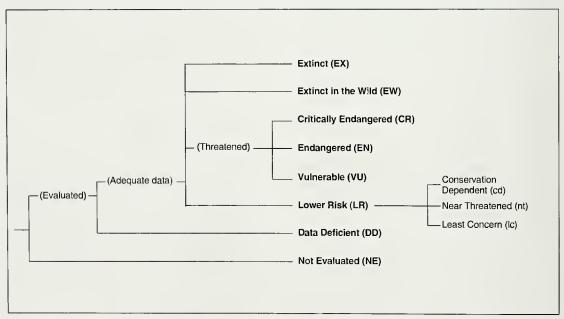


Figure 1. Structure of the Categories.

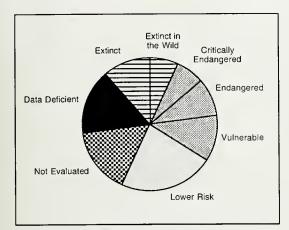


Figure 2. When all species of a higher taxonomic group are placed into one of the eight categories, it provides a useful indication of the current status of, and level of knowledge about that group.

tion on changing patterns and levels of threat. Figure 2 demonstrates how the current status of an entire taxonomic group can be summarized by the IUCN categories.

## The Criteria and Subcriteria for the Categories of Threat

The three categories of threat, Critically Endangered, Endangered, and Vulnerable, are all determined by quantitative criteria. For each of the categories of threat there are five criteria (A-E), which are based on variables closely associated with extinction risk. The criteria A-D also have subcriteria that are used to justify the listing of a species under a given category and criteria. The five criteria are:

- A. Declining Population (past or projected)
- B. Small Distribution and Decline or Fluctuation
- C. Small Population Size and Decline
- Very Small Population or Very Restricted
   Distribution
- E. Quantititative Analysis (e.g., Population Viability Analysis)

The main purpose of the subcriteria is to provide further information to support the listing of a species in a particular category. However, the subcriteria may also provide insight into threats such as direct exploitation, habitat loss, pollution, and hybridization, or they may describe declines recorded by direct observation or changes in an index of abundance.

Although the criteria are expected to be applicable across broad taxonomic groups to encompass species

with very different life histories, it is not intended that all the criteria be applicable to a given species. Species qualify as Critically Endangered, Endangered, or Vulnerable by meeting any one of the five criteria (A-E) for that category of threat.

Requiring that the criteria and subcriteria are stated for each listing of a taxon in one of the categories of threat provides a more objective, informative, and accountable process. The identification of quantitative criteria when classifying a taxon in one of the categories of threat ensures that taxa are being assessed by a common standard, thus improving consistency of the application of the system among different users. The information given by the categories and criteria provides a general indication of the extinction process of a taxon and may be helpful in setting conservation priorities. The categories, criteria, and subcriteria are made public to explain why each taxon has been placed on the list, and the assessment can then be refined as further information emerges.

Although the criteria for each of the categories of threat are based on quantitative thresholds, inference and projection are permitted so that taxa for which there is very little information can also be assessed. Therefore, the person conducting an assessment is expected to use the best available information, in combination with inference and projection to test a taxon against the criteria. If there is any reasonable concern that a species is threatened with extinction, it should qualify for the criteria of one of the categories of threat.

## How to Decipher the Criteria and Subcriteria

Following the scientific and the common name of each threatened taxon in the 1996 IUCN Red List is a category of threat, and if applicable, criteria and subcriteria. The three categories of threat, Critically Endangered, Endangered, and Vulnerable, represent decreasing levels of extinction risk. The quantitative criteria (A-E) help to identify taxa that are appropriate for one of the categories of threat. Finally the subcriteria provide reasons for listing taxa. Figure 3 illustrates how the categories, criteria, and subcriteria are used in the Red List.

The Giant Sea Bass is listed as CR Albd. This means that the category of threat is Critically Endangered, which is defined as, "a taxon that is facing a very high risk of extinction in the wild in the immediate future." This species qualifies as CR under criterion A. The 1 is part of the subcriteria and indicates that there has been a decline of at least 80% in the number of mature individuals over the past 10 years or three generations (whichever is longer for this species). The rest of the subcriteria

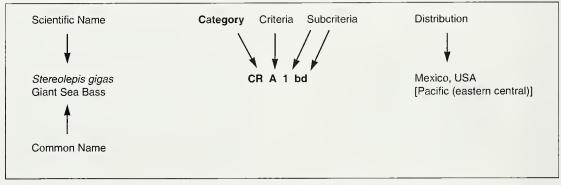


Figure 3. An example of the use of the categories, criteria, and subcriteria in the 1996 IUCN Red List.

listed are b, d, which provide information about how the decline was assessed. In this particular case the subcriteria state that the Giant Sea Bass was listed under the A criterion because of the rapid decline was documented by (b) an index of abundance and (d) exploitation. Using the summary of the IUCN categories and criteria, it is possible to decode the criteria and subcriteria for every taxon listed.

In Table 1 the categories of threat are listed along the top of the page, and the criteria and subcriteria are given in the appropriate columns. First identify the category of threat; then locate which of the five criteria are applicable and identify the subcriterion.

For example, by using Table 1, it is possible to decipher what Endangered: C2a means. First identify the Endangered category in the center at the top of the page. Then follow the Endangered column down to the C criterion which states that the taxa has a small population size and is declining. Identify the quantitative threshold for the Endangered column under the C criterion which is less than 2,500 mature individuals. Then locate the 2a subcriterion which states that the population is experiencing a continual decline and is fragmented with each subpopulation averaging less than or equal to 250 mature individuals.

It should be mentioned that the terms used in the criteria and subcriteria have very specific meanings in this context, or require particular methods to be used for assessing them. These definitions are included in Annex 2 at the end of this publication.

## Lessons Learned in Applying the New IUCN Categories and Criteria

While the IUCN categories and criteria had been tested against many different types of species in its development phase, the compilation of the 1996 IUCN Red List

is the first time that the new system has been applied to such a large number of species with very different life histories. Overall, the system was very well received and it appears to have successfully flagged a wide variety of threatened species. In the process of applying the categories and criteria for the 1996 IUCN Red List, hundreds of specialists had the opportunity to assess all aspects of the new system. This has led to a number of constructive suggestions as to how the system could be fine-tuned. The following discussion outlines many of these recommendations, which focus on slight definition clarifications, and also on aspects of the A criterion that may require further examination.

#### **Definitions**

#### 1. Definition of Mature Individuals

In the current system, mature individuals are defined as individuals capable of reproduction. This definition has been used to provide an indication of the number of individuals that will be able to replace themselves in the next generation. However, in some long-lived species, individual animals are capable of reproduction, but their young are not attaining maturity. Even though such individuals are breeding, for conservation purposes they should not be considered as mature individuals. This definition should be reworded to emphasize that only individuals capable of producing offspring that reach the age of maturity should be considered as mature individuals.

#### 2. Definition of Generation Time

Generation time is currently defined as the average age of mature individuals in a population. In the new IUCN categories and criteria, generation time determines the window of time during which a species' probability of extinction, or its rate of decline, is being examined. For example, the A criterion is used to list species according

## Table 1 Summary of New IUCN Categories and Criteria

Use any of the A-E criteria	Critically Endangered	Endangered	Vulnerable
A. Declining Population			
population decline rate at least	80% in 10 years or 3 generations	50% in 10 years or 3 generations	20% in 10 years or 3 generations
using either	·	· ·	
<ol> <li>population reduction observed, estimated, inferred, or suspected in the past or</li> </ol>			
<ol><li>population decline projected or suspected in the future based on:</li></ol>			
a. direct observation			
b. an index of abundance appropriate for the taxon     c. a decline in area of occupancy, extent of occurrence     and/or quality of behittet.			
and/or quality of habitat d. actual or potential levels of exploitation			
e. the effects of introduced taxa, hybridization,     pathogens, pollutants, competitors, or parasites			
B. Small Distribution and Decline or Fluctuation			
Either extent of occurrence	< 100 km <sup>2</sup>	< 5,000 km <sup>2</sup>	< 20,000 km <sup>2</sup>
or area of occupancy	< 10 km <sup>2</sup>	< 500 km <sup>2</sup>	< 2,000 km <sup>2</sup>
and 2 of the following 3:	= 1	≤ 5	≤ 10
either severely fragmented: (isolated subpopulations with a reduced probability of recolonization, if once extinct) or known to exist at a number of locations	= 1	≥5	≥ 10
2. continuing decline in any of the following:	any rate	any rate	any rate
a. extent of occurrence			
b. area of of occupancy			
c. area, extent and/or quality of habitat			
d. number of locations or subpopulations a. number of mature individuals			
3. fluctuating in any of the following:	> 1 order/mag.	> 1 order/mag.	> 1 order/mag.
a. extent of occurrence	> 1 didei/illag.	> 1 ordanniag.	> r a. oui/magi
b. area of occupancy			
c. number of locations or subpopulations			
d. number of mature individuals			
C. Small Population Size and Decline	050	- 0.500	- 10 000
Number of mature individuals	< 250	< 2,500	< 10,000
and 1 of the following 2:			
rapid decline rate	25% in 3 years or 1 generation	20% in 5 years or 2 generations	10% in 10 years or 3 generations
2. continuing decline and either	any rate	any rate	any rate
a. fragmented or	all sub-pops ≤ 50	all sub-pops ≤ 250	all sub-pops ≤ 1,000
b. all individuals in a single subpopulation			
D. Very Small or Restricted		050	. 1 000
Either 1. number of mature individuals	< 50 (not applicable)	< 250 (not applicable)	< 1,000 area of occupancy
or 2. papulation is susceptible	(not applicable)	(nut applicable)	<100 km <sup>2</sup> or number
E. Quantitative Analysis		000/ fm 00	400/ in 400
Indicating the probability of	50% in 10 years	20% in 20 years	10% in 100 years
extinction in the wild to be at least	or 3 generations	or 5 generations	

to specific rates of decline in the past or future for ten years or three generations, whichever is longer. If a species' generation time is 12 years, then rates of decline are examined over the past and future 36 years.

The current definition of generation time does not work well for species that are experiencing heavy exploitation or direct harvesting. This is because when populations are heavily exploited, the larger older individuals are usually the first to be taken, thus reducing the average age of the population, and decreasing the generation time. With a shorter generation time, rates of decline and probabilities of extinction will be examined over a shorter time-frame, making it less likely for the species to qualify under the appropriate category of threat. To avoid this anomaly, the definition should be reworded so that generation time is defined by the average age of parents in the population, prior to exploitation.

## 3. The Application and Definition of Conservation Dependent

Conservation Dependent is now a subcategory of the Lower Risk category. The subcategory is currently used to highlight species that would qualify for the Vulnerable category if it were not for species-specific or habitat-specific conservation efforts. If this definition were broadened so that Conservation Dependent could be applied to the categories of threat, then the Red List would provide valuable insight into the number of species, at all levels of threat, that are receiving beneficial conservation attention. Conservation Dependent would then be defined as an optional subcriterion used for species that would fall into a higher category of threat or be driven to the point of extinction, were it not for conservation efforts.

#### Challenges with the A criterion

#### 1. Maximum Generation Time

Generation time is defined by the average age of mature individuals in the population. The A criterion states that a taxon's rate of decline should be examined in the past or future 10 years or three generations. Thus, generation time is often used to determine the window of time during which the decline of a taxon will be measured to determine if it qualifies for one of the categories of threat. Generally, the longer the time period, the more likely it is that a taxon will qualify for one of the categories of threat.

Using three generations to monitor a species' population status standardizes measurement of rates of decline across widely different taxa. A minimum of 10 years has been set because there is little that can be done in terms of conservation planning if a taxon is identified as rapidly

declining at the last minute. Currently, there is no upper limit on the time period during which declines are examined. For example, if the generation time of a species is 50 years, then the A criterion requires that the rates of decline be monitored over the past and future 150 years. Just as it is impractical for conservation purposes to use very short generation times, it is in most cases also impractical to attempt to determine what happened too far back in the past, or what may happen in the distant future. A cap of about 75 years would ensure that measured and predicted declines were being assessed over time-frames where circumstances can be judged with more certainty.

#### 2. Identification of Depleted Taxa

Under the A criterion, a species will not be listed under one of the categories of threat unless there are recorded declines of at least 20% over the past or future 10 years or 3 generations, whichever is longer. Therefore, if a population continues to decline at 15% over that time frame, it will not be listed as threatened.

Species that have experienced a major decline such as 90% over the appropriate time frame will be listed as Critically Endangered. However, if the species then declines less than 20% over 10 years or three generations it will no longer be considered threatened. For precautionary reasons the taxon would remain on the list for five years and then would be removed.

In these two situations it appears that the system is not effectively identifying species that have undergone severe depletion and would intuitively be threatened with extinction. However, the A criterion is one of five criteria that have been developed to assess the conservation status of a species. The B, C, D, and E criteria all highlight species that are threatened due to their restricted distribution or low numbers. Thus, if a taxon is not identified by the A criterion, it should be picked up by one or more of the other criteria once the population or distribution becomes small enough. The problem is that some populations undergo extreme depletion, for example a reduction to 5% of the original population, but are still too widely distributed or have too many mature individuals to qualify for any of the other criteria.

Large populations that are reduced to a small percentage of their former population may persist for many generations. However, it is possible that these populations are much more prone to proximate causes of extinction. If this is the case, then there is no specific criterion that effectively flags the high probability of extinction that these species face.

Unless it can be proven that species that have had major past declines do not have a significantly higher probability of extinction, then one option to address this apparent shortfall in the new system would be to use the A2 criterion. This criterion flags species that may experience significant declines in the next 10 years or three generations, whichever is longer. However, it would be more effective for conservation purposes to develop criteria that specifically highlight species that have undergone extreme depletion, but do not qualify for the other criterion.

#### 3. Shifting Time Scale for the A criterion

The A criterion assesses the rates of population decline over time. The criterion is divided into two: Al assesses the rate of decline in the past 10 years or 3 generations, and A2 assesses the predicted rates of decline in the next 10 years or three generations. This rigid division of time-frames may lead to a misrepresentation of a species' conservation status if the decline is occurring at the time of the assessment. For example, if a species has decreased by 10% in the past five years and is projected to decline by another 10% in the next five years, it would not be listed under the current system. Excluding declines that are occurring while the assessment is being made does not make sense when the objective of the criteria is to identify a 20% decline over 10 years or three generations. However, the original intention was that there should be an opportunity to use a shifting time window, which the current wording of the criteria does not make clear. The A1 and A2 subcriteria could possibly be merged, leaving a single A criterion. The past and future time-frames of 10 years or three generations could be maintained, but should be flexible enough to measure declines over any period, providing that the furthest point in time from the present (either past or future) is no greater than 10 years or three generations (whichever is longer).

#### 4. Rates of Decline and Probability of Extinction

The A criterion is based on the assumption that a species is more prone to extinction when numbers of mature individuals show persistent declines. With a 20% decrease in mature individuals the species qualifies for Vulnerable, with a 50% decline, Endangered, and with an 80% decline, Critically Endangered. However, species with high growth rates, high reproductive potential, and early maturity can experience a significant decrease in mature individuals, but may be less prone to extinction than species with low growth and reproductive rates. The categories of threat do not reflect probability of extinction with precision across taxa, and may be particularly imprecise when only the A criterion is used. This issue requires further investigation.

#### 5. Managed Populations and Rates of Decline

When exploiting wild populations, the management strategy is often to reduce the number of mature individuals in order to increase productivity, thus increasing the sustainable harvest levels. For some fish populations, managing for sustainable harvest entails a reduction of more than 50% of mature individuals. Despite the fact that these reductions are intentional, these species are identified as potentially threatened with extinction under the red listing system.

It is very difficult to determine levels of exploitation that are sustainable, and even if accurate harvest levels are determined, history has repeatedly shown that such management schemes are rarely followed. Also, there is still uncertainty as to whether or not a population of highly reproductive fishes, managed at reduced numbers of mature individuals over long periods of time, are significantly more prone to extinction. There could be long-term negative genetic implications resulting from this type of management. Species that are exploited in such a manner might persist for several generations, slowly becoming more susceptible to extinction.

Currently, if the number of mature individuals in a population decreases by 20% over 10 years or three generations in managed populations, then the species is listed as threatened. Once the population is no longer decreasing by 20% over 10 years of three generations (e.g., if the management is now achieving constant population size at high productivity levels), then it is retained on the list for five years and then delisted. Therefore, if the number of mature individuals is reduced by 20% or more as part of a sustainable management scheme, the taxon will initially be listed in a category of threat, but if the management is successful the species will soon be removed from the threatened list.

It is recognized that in the adoption of a completely new system that there will be growing pains and that slight revisions are inevitable. However, we are still learning, and many issues require further examination, which makes it impractical to revise the new system immediately. Only once we are certain that the majority of the glitches have been identified and addressed will the IUCN categories and criteria undergo revision.

## **Analysis**

By Jonathan Baillie

#### The Status of Globally Threatened Species

Ideally, the IUCN Red List would contain detailed information on the conservation status of every species in the world and identify the region or ecosystem in which each species lives. This information would make it easier to estimate the magnitude of the loss of species diversity and would greatly aid in the identification of areas enduring the greatest biological impoverishment. Conservationists would then have better access to sound information from which to set priorities, and governments and decision makers would be more aware of the implications of their policies and actions on the future of the world's biological resources.

Currently, the conservation status is only known for a small proportion of all animal species, and there is a strong bias toward terrestrial vertebrates and species found in biologically well-studied regions of the world. However, what we do know indicates clearly that there is strong cause for concern.

This edition of the Red List, which includes 5,205 species threatened with extinction, is the most comprehensive list of globally threatened species ever compiled. All known species of birds and mammals have been evaluated, with the result that 25% of mammal species and 11% of bird species are classified as being threatened with extinction. Not all reptile, amphibian, and fish species have been assessed, but of those that have been evaluated, rough estimates of the percent that are threatened are: 20% of reptiles, 25% of amphibians, and 34% of fishes (mostly freshwater).

Relatively few invertebrates (mainly insects, spiders, crustaceans and molluscs) have been assessed making it difficult to estimate the percentage that are threatened. However, among the invertebrate groups that have received the most attention, there are large numbers of threatened species: more than 500 insects, 400 inland water crustaceans, and 900 molluscs.

The information in this book is meant be used in a variety of ways. First, it is hoped that the publication of the extensive lists of threatened species and subspecies will draw attention to the serious situation now faced by animal species worldwide. Second, the detailed information included on which species and higher taxa are most at risk, as well as information on the general nature of the threats, and the geographical distribution of these species, will enable decision makers to address the issue

by supporting appropriate conservation actions. Finally, the data presented will provide a rich source of basic information on which conservation biologists and other scientists can base analyses aimed to understand and thus better address the current trend of biological diversity depletion.

The following general analysis is based on the information presented in the 1996 IUCN Red List of Threatened Animals. It is hoped that specialists will use the tables and data in this book to explore the issues further.

#### Biases in the 1996 IUCN Red List

When reading this analysis section of the 1996 IUCN Red List, it is important to recognize some of the biases that exist in the data in order to understand why some higher-taxon groups and regions appear to have more threatened species than others.

The current information on the status of threatened species is heavily biased towards terrestrial vertebrates. Figure 1 indicates the total number of species that have been categorized as threatened for each major vertebrate group (mammals, birds, reptiles, amphibians, and fishes), as well as for a number of invertebrate groups (molluses, insects, crustaceans, and other invertebrates).

From the number of vertebrates and invertebrates listed as threatened, it may appear that the two groups have received a similar degree of attention. However, more than 95% of all known animals are invertebrates (Hammond 1995). Hence, this group is proportionally under-represented.

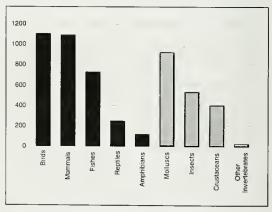


Figure 1. The number of threatened vertebrate versus invertebrate species that have been listed in the 1996 IUCN Red List.

The need for a stronger focus on invertebrate conservation has long been recognized, but information on the status and distribution of the majority of invertebrates simply does not exist (Groombridge 1993). Although the number of invertebrates listed in the last two IUCN Red Lists has sharply increased, any attempt to ensure that they are adequately represented would require large amounts of time and resources. However, it is unlikely that sufficient resources will be made available for invertebrate conservation until the values of the general public and national governments change to recognize the need to protect all forms of life.

The attention of naturalists and conservationists has also long been focused on terrestrial rather than marine environments. Although about two-thirds of the earth's surface is covered by seas, our knowledge of the basic ecology, distribution, and status of most marine species is extremely limited. As a result, marine species are poorly represented in this list. Even among vertebrates, information on marine species is very poor compared to their terrestrial counterparts. Of the terrestrial vertebrates, roughly 48% have been assessed, while only 1.7% of the marine vertebrates (primarily three classes of fishes) have been evaluated.

Some regions have been more comprehensively assessed than others. Countries such as the United States, Australia, and South Africa, which have been subject to detailed review, may have proportionally more species listed than countries in less well studied regions. Also, specific countries or regions that are the focus of an SSC Specialist Group, or which have produced their own regional or national Red Lists, may also have a relatively greater representation in the 1996 IUCN Red List of Threatened Animals. Despite these biases, the information in the Red List can be used to draw out some general conclusions.

## Which Vertebrate Groups are the Most Threatened?

Birds were the first vertebrate class to be comprehensively assessed. This assessment was based on an earlier version of the new system, but one almost identical to the new IUCN categories and criteria (Collar *et al.* 1994). The results show that 168 (2%) of all bird species are Critically Endangered, 235 (2%) are Endangered, and 704 (7%) are Vulnerable (Figure 2). In total, 11% of the world's avifauna is threatened and another 9% is nearthreatened. The fact that 11% of all bird species are threatened was of great concern (Collar *et al.* 1994), and it was feared that other terrestrial life-forms, not yet comprehensively evaluated, might be experiencing similar degrees of threat. The IUCN categories and criteria have

now been applied to all mammals, and the results indicate that the level of threat to biodiversity could be even worse than anticipated. For mammals, 169 species (4%) are Critically Endangered, 315 (7%) are Endangered, and 612 (14%) are Vulnerable (Figure 2). This means that 25% of the total number of mammal species are threatened with extinction. If the Lower Risk subcategories, conservation dependent and near threatened, are taken into consideration, 41% of all mammals are either threatened or close to Vulnerable.

Given the fact that there are more than twice as many bird species as mammal species, it is interesting that the total number of threatened species in each threat category is very similar. Four mammal and three bird species are Extinct in the Wild; 169 mammal and 168 bird species are Critically Endangered. In total there are 1,099 threatened and Extinct in the Wild mammal species and 1,111 threatened and Extinct in the Wild bird species.

Perhaps mammals are an anomaly, and the status of birds is a more accurate indicator of the status of other life-forms. Unfortunately, current information suggests that mammals are better indicators of the level of threat of other taxonomic groups. Since reptiles, amphibians and fishes have not been comprehensively assessed, it is impossible to make definitive statements about their overall conservation status. However, approximately 20% of the reptile, 25% of the amphibian, and 34% of the fish species that have been assessed are threatened with extinction. For summary tables on the status of each taxonomic group refer to Data Table 2, page 50.

It appears that biodiversity is much more threatened, at least at the species level, than was previously realized. It has been widely assumed that approximately 10% of the world's species are globally threatened, following the "bird model". But if birds, with their high levels of mobility, are on the average much less threatened than other groups, the use of this model as a reference point should be reconsidered. If mammals are better indicators of the status of other taxonomic groups, then 25% of the world's species could be globally threatened, a sobering statistic.

## Which Mammal Orders are the Most Threatened?

Of the 26 orders of mammals, 24 contain threatened species. The six largest orders all have more than 50 threatened species: Rodentia 330, Chiroptera (bats) 231, Insectivora 152, Carnivora (cats, bears, otters etc.) 65, Primates 96, and Artiodactyla (even-toed ungulates) 70. Carnivora, while the fourth largest order, has fewer threatened species in total than Primates and Artiodactyla. This is surprising, because intuitively, one

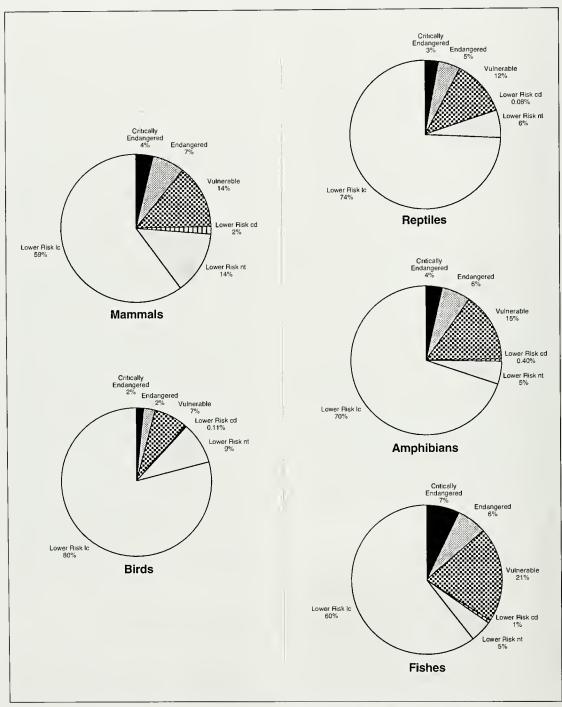


Figure 2. Which vertebrates are the most threatened? The mammal and bird pie charts represent all the known species for which there is enough information to make a sound conservation assessment. The reptile, amphibian, and fish charts represent all assessed species for which there is adequate information to assign a conservation status. The figures used for the number of assessed species are based on the number of species estimated to be assessed in the 1994 IUCN Red List. These estimates for the number of assessed species are 20% of reptiles, 12% of amphibians, and <10% of fishes (Groombridge 1993).

would expect a group of species so high in the trophic scale to have a very large number of threatened species. For the total numbers of threatened mammals in each order see Data Table 1, page 44.

If these same six orders are examined in terms of the proportion of species that are threatened in each, the sequence changes significantly (Data Deficient species have not been included): Primates 45.5%, Insectivora 36%, Artiodactyla 32.7%, Chiroptera 26.2%, Carnivora 25.8%, and Rodentia 16.6%. While these numbers are very alarming, there are many smaller orders that have a much higher proportion of threatened species (Figure 3).

Figure 3 depicts the proportion of each order that is threatened. This approach highlights some of the smaller orders with a high proportion of threatened species. This is important because each order represents a morphologically and genetically unique group. One hundred percent of Proboscidea (two species of elephant), Notoryctemorphia (two species of mole-like marsupial), Sirenia (four extant species of sea cow), and Microbiotheria (one species of opossum-like species) are threatened. In the first two of these orders, all the species are Endangered; and in the last two, all are Vulnerable.

Other small and highly threatened orders are: Perissodactyla (horses, tapirs and rhinos); Macroscelidea (elephant shrews); Monotrema (egg-laying mammals); Hyracoidea (hyraxes); and Dermoptera (flying lemurs). The 18 species of Perissodactyla have the highest percentage of Critically Endangered species (four species; 22%). The situation is even worse when one considers that, in addition, one species is Extinct in the Wild, four are Endangered, three are Vulnerable, one is conservation dependent, and one is near-threatened. In the order of Macroscelidea, three species are Endangered, and four are Vulnerable. There are three species of egg-laying mammals in the order Monotremata. Of these, one is known to be Endangered. Three of the six species of hyraxes and one of the two species of flying lemurs are listed as Vulnerable.

## Which Bird Orders are the Most Threatened?

Of the 27 orders of birds, 23 contain threatened species. The following five orders have more than 50 threatened species each: Passeriformes (song birds) 542; Psittaciformes (parrots) 89; Galliformes (pheasants, partridges, etc) 71; Columbiformes (pigeons and doves) 55; and Gruiformes (rails and cranes) 54. While these are all in the top ten largest orders in terms of numbers of species, the correlation between the size of the group and the number of threatened species does not match as well as it does with the larger mammal orders. For example, there

are more species within the Apodiformes (swifts and hummingbirds) than four of the five orders listed above, yet fewer species (35) are listed as threatened. For the total number of threatened birds in each order refer to Data Table 1, page 44.

The five orders of birds that have the highest percentage of threatened species are: Gruiformes (25.6%); Galliformes (25.2%); Psittaciformes (24.7%); Columbiformes (16.7%); and Coraciiformes (kingfishers, bee-eaters, etc.) (11.5%). Among the Passeriformes, only 9.5% of the species are threatened.

Other medium-sized and small orders that should be highlighted include: Procellariiformes (albatrosses and petrels), Podicipediformes (grebes), Apterygiformes (kiwis), and Casuariiformes (cassowaries). Twenty-nine percent of Procellariiformes and 18% of Podicipediformes are threatened. These percentages are not very high in relation to some mammal orders. However, both orders have very high percentages of Critically Endangered species, 10% and 9% respectively.

There are only three species of kiwis, of which all are considered Vulnerable. Of the four species of cassowaries, two are Vulnerable and one is considered Lower Risk near-threatened.

## Which Reptiles, Amphibians, Fishes, and Invertebrates are the Most Threatened?

In total, 253 species of reptiles have been assessed as threatened with extinction. Of the six orders of reptiles, three have been completely assessed. These are Crocodylia (crocodiles and alligators), Rhynchocephalia (tuatara), and Testudines (tortoises, turtles, and terrapins). The remaining three orders (snakes, lizards and amphisbaenians) make up the majority of reptiles and are still awaiting comprehensive assessment. However, much insight can be gained by looking at the status of the three groups that have been comprehensively evaluated.

There are two species of tuatara, both of which are found on small islands around New Zealand. These are the last remaining representatives of an order, and one of the species is listed as Vulnerable.

Of the 23 species of crocodilians, ten (43%) are threatened (Figure 5). While this high percentage is alarming, and some species continue to decrease in numbers, the crocodilians are one of the few orders that have experienced an overall improvement in status over the past 20 years due to conservation measures (Messel *et al.* 1992).

Of the known species of tortoises, turtles and terrapins, (not including Data Deficient species) 96 (38%) are threatened, 47 (19%) are near-threatened, and one is con-

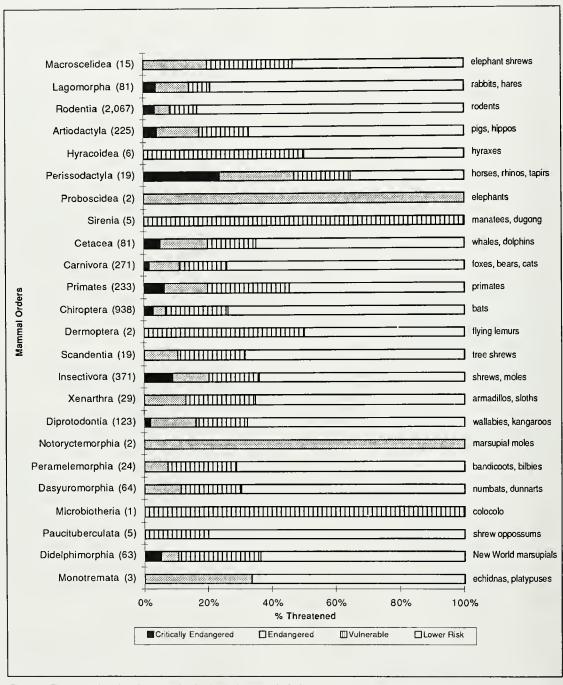


Figure 3. The proportion of each mammal order that is threatened. Orders where no species are threatened have not been listed. These are Pholidota (pangolins) and Tubulidentata (the aardvark). While the Order Pholidota is not listed, four of the seven species are listed as Lower Risk near threatened. Species that are Data Deficient are not included. The total number of species in each order is listed in parentheses. Examples of each order are provided on the right hand side.

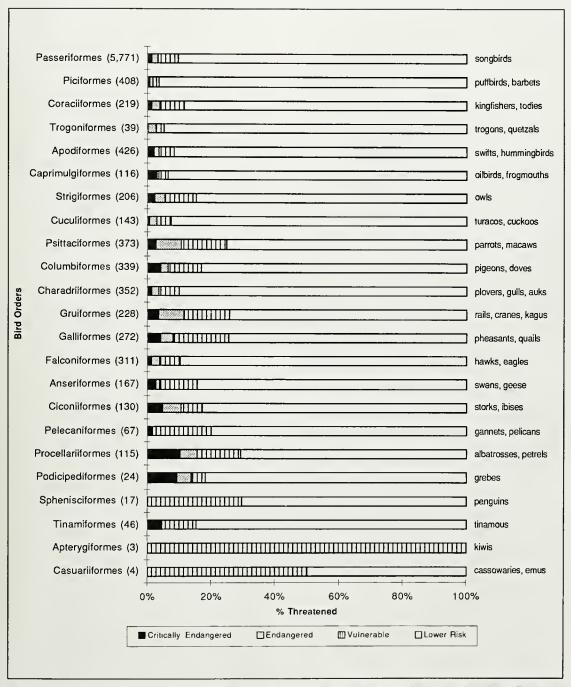


Figure 4. The proportion of each bird order that is threatened. Bird orders with no threatened species have not been listed. These are Struthioniformes (ostriches), Rheiformes (rheas), Gaviiformes (loons), and Coliiformes (mousebirds). The total number of species in each order is listed in parentheses. Examples of each order are provided on the right hand side.

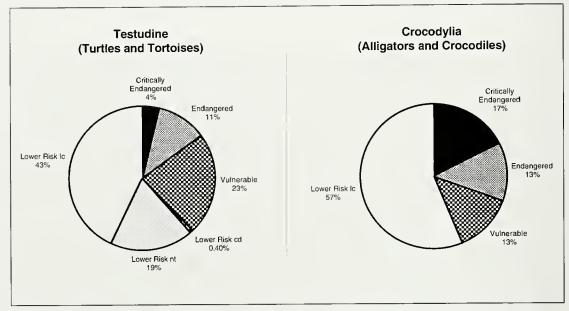


Figure 5. The status of two reptilian orders that have been completely assessed, Testudine (turtles and tortoises) and Crocodylia (alligators and crocodiles). Data Deficient species have not been included. The subcategories Lower Risk conservation dependent and Lower Risk near threatened are not included on the Crocodylia chart, since none of these species fall into these subcategories.

servation dependent (Figure 5). There is, therefore, cause for concern for 57% of these species. The majority of this order is comprised of freshwater turtles, and the high proportion of threatened species within this group corresponds with other freshwater-dependent species such as inland water crustaceans, freshwater fishes, and freshwater molluscs. However, the seven turtle species which have a completely marine existence are all threatened.

While an examination of the three orders of reptiles that have been completely assessed only provides a partial picture of the current status of all reptiles, the high proportion of threatened species in each of these orders (50%, 43% and 38%) indicates that the overall estimate of 20% of reptile species as threatened is probably low for the entire class.

Species from two of the three amphibian orders have been evaluated. Eighty-eight species of Anura (frogs and toads) and 36 species of the order Caudata (salamanders and newts) have been listed as threatened. These numbers are certainly under-estimates as relatively few have been evaluated. No species in the order Apoda (caecilians) has yet been assessed. There has been much debate as to whether or not amphibians are experiencing a high rate of global decline (Wyman 1990; Wake 1991; Pounds and Crump 1994). Given that the percentage of amphibians that are estimated to be threatened (25%) is similar to that of mammals, reptiles, and fishes, immedi-

ate evidence suggests that they are experiencing a similar level of threat to most other orders. Because only a very small proportion of amphibians have been assessed, it is certainly possible that the percentage of threatened species has been significantly underestimated.

Fishes are the largest group of vertebrates in terms of numbers of species, totaling approximately 24,000 described species. Threatened species have been identified in four of the six classes of fishes, including 32 of the 58 orders. The assessments have focused primarily on freshwater species. However, over 100 marine fishes have been added to the 1996 1UCN Red List including sharks, tunas, coral reef fishes, and seahorses. The status of the remaining 14,000 or so marine species is unknown, but given the recent additions to the list, it is clear that they are not as secure as was once believed.

Much more is known about the status of fish species occurring in freshwater environments. Orders for which all species have been assessed include Acipenseriformes (sturgeons and paddlefishes) and Coelacanthiformes (coelacanth). All sturgeon and paddlefish species are threatened or near threatened: 6 are Critically Endangered, 11 are Endangered, 8 Vulnerable, and 2 are near threatened. This is a very small order in which the majority of species are heavily exploited (DeSalle and Birstein 1996). Thus, this high level of threat is unlikely to be indicative of its entire class. The coelacanth, listed as

Vulnerable, is the only living species in its order and class. Orders with particularly high numbers of threatened species are Cypriniformes (minnows, carps, loaches, suckers, etc.) with 191 species listed, and Perciformes (Perch, Cichlids, etc.) with 227. These are primarily threatened due to the introduction of exotics, habitat degradation, and construction of barriers and other obstacles to movement. Many regions still remain to be assessed for the conservation status of their freshwater fish species, but wherever surveys are conducted more threatened fishes are found (Groombridge 1993).

Most animal species are invertebrates, and the overwhelming majority of threatened species is likely to be invertebrates. Very few of these invertebrate populations have been assessed relative to their total numbers, thus it is difficult to infer much about their conservation status. The groups that have received most attention are crustaceans, insects, and molluses. Within the class Insecta (insects), the orders with over 100 threatened species are Hymenoptera (social insects), Lepidoptera (butterflies and moths), and Odonata (damselflies and dragonflies). The fact that these orders have more known threatened species than the others is probably a reflection of their relative popularity. It is clear that those insect groups that have received minimal attention have many threatened species and further examination will most likely yield similar results.

There are more threatened molluscs (920 total) included in this Red List than any other invertebrate group, but the number that have been assessed only represents a small proportion of the estimated 70,000 documented species (Hammond 1995). The outstanding gap in our knowledge of threatened molluscan taxa is the tropical forest environments, where many small range endemics are most likely declining due to habitat destruction. Two of the classes of molluscs are included in the Red List: Gastropoda and Bivalvia. Of gastropods, a high percent of threatened species are island endemics endangered by habitat destruction and/or the introduction of exotics. These species make up roughly 38% of all threatened molluscs. In the Pacific Islands, a major problem is the continued spread of the predatory snail Euglandina rosea and the use of alien flatworms as biological control agents. About 18% of the threatened molluscs are spring-snails from the United States, Australia, and Europe. These snails tend to have very restricted ranges, and are dependent on good water quality and the persistence of springs that are often subject to human utilization (Seddon in prep).

Until the 1996 IUCN Red List only a few marine molluscs were listed as threatened (giant clams), and most were commercially harvested. As a result of incidental harvesting, and habitat decline due to invasive alien plant species, a number of narrow range endemic marine species have now been added to the list. However, the majority of the threatened bivalves are freshwater species, that are threatened due to the introduction of exotic species, construction of man-made barriers, over-harvesting, pollution, and habitat destruction. The fact that such a high percentage of threatened mollusc species occur on islands and in restricted freshwater environments is consistent with data from other taxonomic groups, which suggest that species occurring in these systems are particularly likely to be threatened.

The number of threatened inland freshwater crustaceans strongly supports the notion that species in freshwater habitats are particularly at risk. The two orders with the greatest number of threatened species are the Decapoda (crayfishes) and the Amphipoda (amphipods) with 168 and 67 threatened species respectively. The crayfishes at risk are virtually all threatened by habitat loss. Most of the threatened amphipods live in extremely restricted and vulnerable environments (caves). Only two species of marine crustaceans are included in the Red List, the coconut crab and the California Bay pea crab. The status of other species of marine crustaceans is unknown.

#### Where are the Threatened Taxa?

## Countries with the Largest Number of Threatened Species

The identification of the countries with the largest number of threatened species enables countries to be informed of their global responsibility to protect and maintain all species for which they are the stewards. Not all countries are the same size or harbor equal numbers of species, thus each country should not be evaluated by the same standard.

This section includes discussion relating to mammals and birds and highlights the countries with the largest numbers of threatened species. In many cases, estimates are given for the following: the total number of species in a region; the percentage of endemic species; and the percentage of a country's species that are threatened. These estimates are based on figures in the World Conservation Monitoring Centre (1994). Taxonomy followed in this source might differ from that used in the Red List. However, it is important to include these estimates of species richness and endemism, as they give perspective to the levels of threat in each country.

#### **Mammals**

With 128 threatened species, Indonesia has by far the largest number of threatened species in the world, followed by China and India each with 75 threatened

Table 1
Countries with the Most Species of Threatened (CR, EN, VU) Mammals

	Number of Threatened Mammais	Total Number of Mammals in Country	Percent Threatened	Total Number of Endemics
Indonesia	128	436	29%	201
China	75	394	19%	77
India	75	316	24%	44
Brazil	71	394	18%	96
Mexico	64	450	14%	140
Australia	58	252	23%	198
Papua New Guinea	57	214	27%	57
Philippines	49	153	32%	97
Madagascar	46	105	44%	77
Peru	46	344	13%	45
Kenya	43	359	12%	21
Malaysia	42	286	15%	27
Zaire	38	415	9%	28
Viet Nam	38	213	18%	7
Ethiopia	35	255	14%	31
USA	35	428	8%	101
Colombia	35	359	10%	28
Thailand	34	265	13%	7
South Africa	33	247	13%	27
Tanzania	33	322	10%	14

species. These countries all have high numbers of mammal species (Table 1). Indonesia is ranked second in total number of mammal species, China fifth, and India about tenth. These countries also have extremely high human populations. In sum, they account for 43% of the world's population (Rand McNally 1992). While these countries are some of the most species rich in the world, they also have a high proportion of mammals that are threatened with extinction: Indonesia 29%, China 19%, and India 24%. However, not all countries with high total numbers of mammal species have such high proportions of threatened species. Mexico, Zaire, and United States also rank in the top ten countries with the most mammal species, but harbor a significantly lower proportion of threatened mammals: 14%, 9%, and 8% respectively.

After Indonesia, China, and India, the countries with the largest number of threatened manual species are, in decreasing order: Brazil, Mexico, Australia, Papua New Guinea, Philippines, Madagascar, and Peru. For more information on the number of threatened species in each country, refer to Data Table 3, page 51.

Australia, the Philippines, and Madagascar all have exceptionally high proportions of mammal species that are endemic. They are also among the countries with the highest percent of mammals that are threatened. Twenty three percent of Australia's mammals are threatened, and 79% of the country's species are endemic; 32% of the Philippine mammals are threatened, and 63% of all their mammals are endemic; 44% of Madagascar's mammals are threatened, and 73% of all the country's mammals are endemic.

As shown in Figure 6, the countries with the most threatened species are not all located in one region. Of the 20 countries with the most threatened mammals, 35% are from Asia, 30% from Africa, and 15% from South

Table 2
Countries with the Most Species of Threatened (CR, EN, VU) Birds

	Number of Threatened Birds	Total Number of Birds in Country	Percent Threatened	Total Number of Endemics
Indonesia	104	1,531	7%	397
Brazil	103	1,635	6%	177
China	90	1,244	7%	67
Philippines	86	556	15%	183
India	73	1,219	6%	55
Colombia	64	1,695	4%	62
Peru	64	1,678	4%	109
Ecuador	53	1,559	3%	37
USA	50	768	7%	71
Viet Nam	47	761	6%	10
Thailand	45	915	5%	3
Australia	45	751	6%	355
Myanmar	44	999	4%	4
New Zealand	44	287	15%	150
Argentina	41	976	4%	19
Russia	38	?	?	13
Mexico	36	1,026	4%	89
Malaysia	34	736	5%	11
Japan	33	583	6%	21
Papua New Guinea	31	708	4%	85

America. While 30% of the 20 countries with the most threatened species are in Africa, only Madagascar is listed in the top ten.

#### **Birds**

Indonesia, Brazil, and China have the highest numbers of threatened species of birds: 104, 103, and 90 respectively. Indonesia has the fifth highest number of bird species in the world, of which 7% are threatened. It also has the most endemic bird species. Brazil has the third largest number of bird species with 6% of them threatened. Although China has the eighth largest number of bird species, it has the third largest number of threatened species. As is the case with the mammals, the countries with the most threatened species also have extremely high human populations. Of the 20 nations with the most threatened bird species, these three countries have about the average proportion of species at risk of extinction.

However, countries such as Bolivia, Venezuela, and Zaire, not listed on Table 2, also have high numbers of bird species (over 1,000 each), yet these three countries have less than one third of the number of threatened species of the countries listed above, and roughly 2% of each nation's avifauna is threatened.

Other countries that harbor large numbers of threatened bird species are, in decreasing order: the Philippines, India, Colombia, Peru, Ecuador, the United States, and Viet Nam.

Countries listed in Table 2 with a high proportion of endemic birds are Indonesia, the Philippines, Australia, and New Zealand. While the percent of threatened birds in Indonesia and Australia is close to the average of all countries listed in Figure 2, 15% of the avifauna of the Philippines and of New Zealand is at risk of extinction, a remarkably high figure for birds.

Figure 7 clearly demonstrates that the countries with

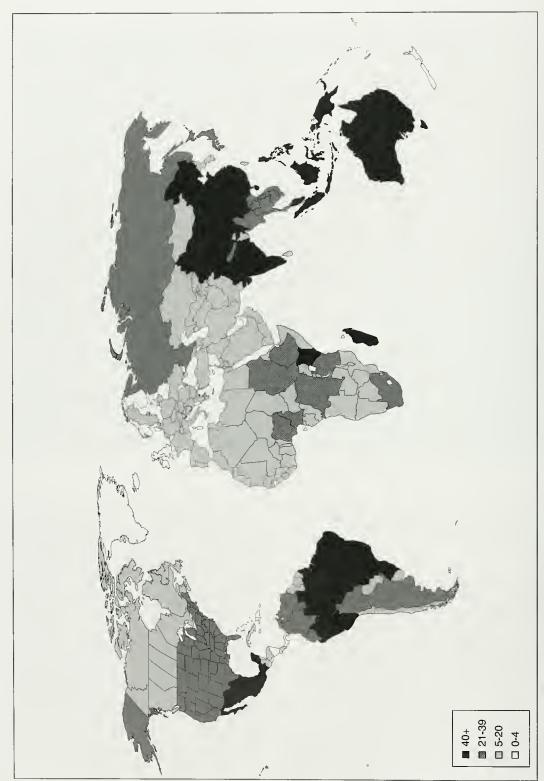


Figure 6. The geopolitical units with the most species of threatened (CR, EN, VU) mammals. This map is meant as a general guide to indicate where the highest number of threatened species are found.

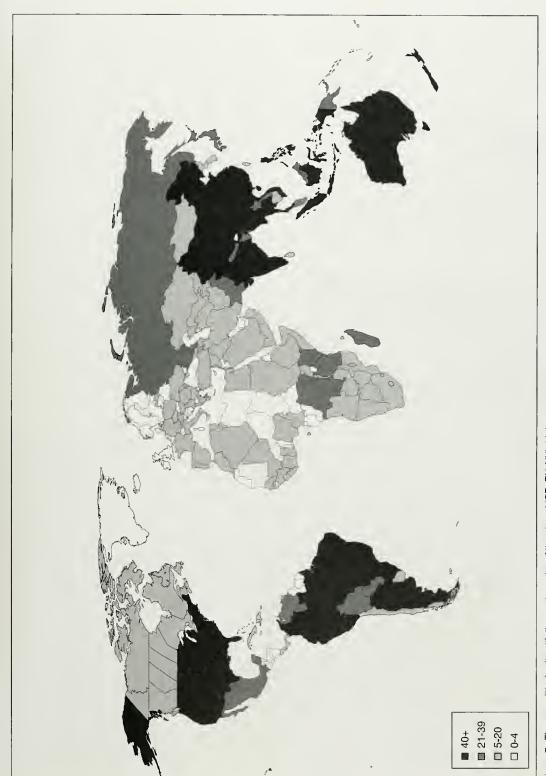


Figure 7. The geopolitical units with the most species of threatened (CR, EN, VU) birds. This map is meant as a general guide to indicate where the highest number of threatened species are found.

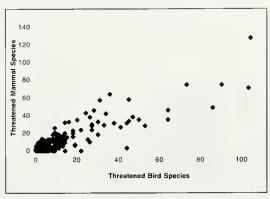


Figure 8. The correlation between threatened bird and mammal species within 230 geopolitical regions (r = .74).

the highest number of threatened bird species are located in the New World and Asia. Of the 20 countries with the largest number of threatened avian species 50% are from Asia, 25% South America, and 15% from Oceania. It is of particular note that there is not one African country listed in Table 2.

### The Relationship Between Areas of Threat for Birds and Mammals

Many countries with large numbers of threatened birds also have large numbers of threatened mammals. Indonesia, China, Brazil, and India appear in the top five for both classes.

Figure 8 shows a strong relationship between the number of threatened birds and threatened mammals found in 230 different geopolitical units of the world. While there could be many factors influencing this correlation, such as country size and number of species in each geopolitical unit, this correlation indicates that, generally, where there are areas of larger numbers of threatened birds there will also be larger numbers of threatened mammals. This relationship suggests that the two groups may be susceptible to similar types of threat. If such a relationship could be established across all taxa, while remaining constant at different geographic scales, specific indicator groups could credibly be used to set priorities for conservation. The geographic threat patterns of other vertebrate groups is much less clear, as these groups have not been thoroughly assessed.

## Reptiles, Amphibians, Fishes, and Invertebrates

The taxonomic groups covered by Figure 9, have not been comprehensively assessed, and thus are suscepti-

ble to regional biases based on information availability. For example, it is not likely that the United States has twice as many threatened invertebrate species as any other country. The reality is that the status of molluscs, crustaceans, and insects is particularly well-known in this country. Although the sequence of countries and the number of threatened species is very incomplete, Figure 9 clearly identifies some countries with large numbers of threatened species in these taxonomic groups. For further information on the number and status of species in each geopolitical region, refer to Data Tables 3 and 4, starting on page 51.

### **Factors Affecting Threat**

The IUCN Red List categories have been designed to identify species that are threatened with extinction by flagging those taxa that are: experiencing significant population declines, restricted in distribution, have very low population numbers, or exhibit any combination of these factors. Also, some species have been listed on the basis of very small distributions (making them susceptible to stochastic events). The majority of species qualify as Critically Endangered, Endangered, or Vulnerable as a result of human-induced threats, though there are often many reasons why a species is listed as threatened.

Habitat reduction, fragmentation, and degradation are unquestionably the most significant threats to the majority of species at risk of extinction (Hanski et al. 1995). This is supported by the high percentage of species, in all major taxonomic groups, listed with the criteria/subcriteria combinations that specifically cite habitat loss or degredation as a threat: A1c; A2c; B1+2c; B2c+B3 and any of the B3 subcriteria (a, b, c, d). It is likely that many species listed under Criteria C, D, and E are also threatened due to habitat loss and degradation, but it is not required that specific threats are identified for these criteria. The following figures are based on the proportion of threatened species in each major taxonomic group where habitat loss or degradation is specifically identified as one of the main reasons for the species threatened status: Mammals 75%, Birds 44%, Reptiles 68%, Amphibians 58%, Fishes 55%, Crustaceans 52%, Insects 47%, Bivalves 95%, and Gastropods 50%. While this is undoubtedly an underestimate of the proportion of species that are threatened due to habitat reduction, fragmentation, and degradation, it clearly highlights the importance of maintaining intact ecological systems for the preservation of biodiversity.

The recent human population explosion in conjunction with economic development, has led to large-scale transformation of natural systems into human-dominated landscapes. The growing human population increases

pressure on the world's remaining intact habitats, including the most biodiversity rich regions of the world, such as in tropical forest countries. Habitat reduction, fragmentation, and degradation cause many species to decline in numbers and split once contiguous populations into several subpopulations, each of which has an elevated extinction risk (WCMC 1992; Hanski *et al.* 1995).

The introduction of non-native species often leads to hybridization, competition, predation, disease, parasites, and the alteration of ecological relationships between species, thus threatening entire ecological communities. Although the introduction of exotics is a growing threat in all ecosystems, it is particularly severe in aquatic systems and on oceanic islands, where many species have evolved in relatively small, isolated environments. This is reflected in the high number of island birds and molluscs, and freshwater fishes and molluscs, that have become extinct during the past 400 years, in part, as a result of the introduction of exotics (WCMC 1992).

Exploitation of species is responsible for the severe decline of many of the larger vertebrate and marine fish species in the Red List. The A1d and A2d criterion and subcriteria identify species that have experienced or will undergo rapid declines as a result of actual or potential levels of exploitation. The proportion of threatened species listed under this criterion and subcriteria provide

a general indication of the major taxonomic groups that are experiencing the greatest levels of exploitation. However, it does not necessarily represent the percent of species threatened due to exploitation, because species may be listed under other criteria (B, C, D, and E) that do not specify whether exploitation is a specific threat. As a proportion of the number of threatened species, 13% of mammals, 7% of birds, 31% of reptiles, and 68% of marine fishes were assessed with the A1d or A2d criterion and subcriteria.

The declines, due to exploitation, are the result of harvesting for reasons of commercial value, human subsistence, and sport. Other important human-induced threats include pollution and climate change (this latter factor is believed to be particularly significant for high-altitude amphibian species).

### Changes from the IUCN Red List Over the Last Six Years

A summary of the number of threatened species recognized in 1990, 1994, and the current 1996 edition of the IUCN Red List, in each major group of animals, is shown in Table 3. Changes in these data reflect changes in the taxonomic extent of assessments, in the systematics and

Table 3		
<b>Total Number of</b>	Threatened	Species

	1990	1994	1996	
Mammals	535	741	1,096	
Birds	1,026	970	1,107	
Reptiles	169	316	253	
Amphibians	57	169	124	
Fishes	713	979	734	
Invertebrates	1,977	2,754	1,891	
Total	4,477	5,929	5,205	

Note: The figures for 1990, 1994, and 1996 (this book) are not exactly comparable. The 1990 figures exclude Ex species but include Ex? and include 182 Commercially Threatened (CT) invertebrates. 1994 figures exclude all these but include K (Insufficiently Known) species. The 1996 figures include only species in the new CR, EN, and VU categories.

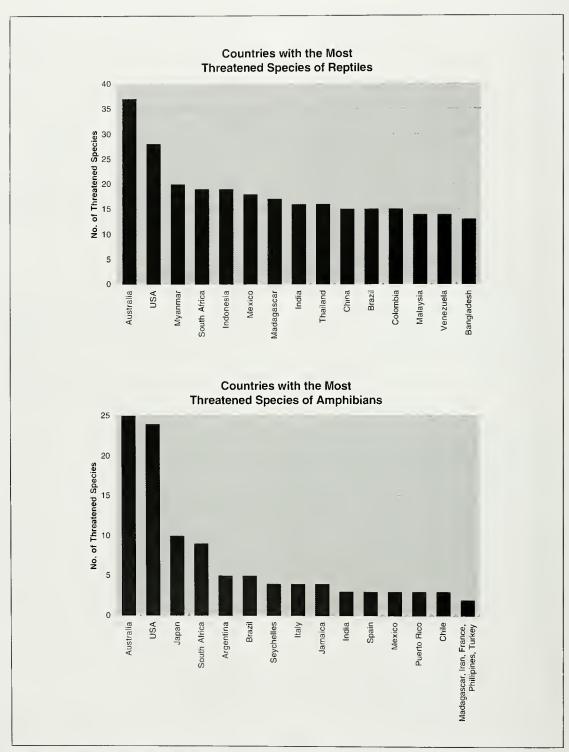
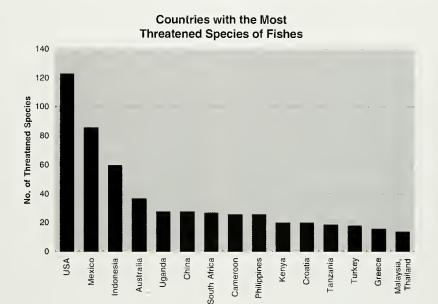
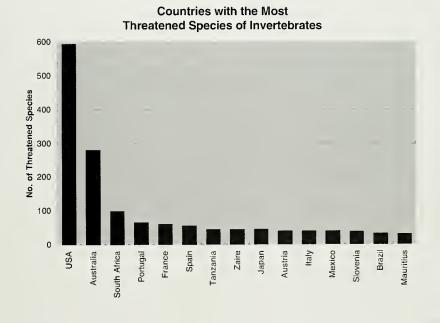


Figure 9. The fifteen countries with the largest number of known threatened reptiles, amphibians, fishes, and invertebrates. In the amphibian and fish graphs, there are several countries with the same number of threatened species. The countries tied for fifteenth place are lumped together for graphical purposes.





nomenclature of the species listed, in the categories that were included in the summary in the past (see footnote to table), and most notably, the major redesign of the category system used for the 1996 assessments. The summary data derived from recent Red Lists do not yet provide a firm guide to changes in the "on the ground" conservation status of the world fauna, but 1996 will set a baseline for mammals and birds: leaving changes in nomenclature aside, future assessments using the revised system will much more accurately indicate changes in the actual conservation status of these species.

The 1994 figures included species in the old Insufficiently Known (K) category; if assessed, most such species would now appear as Data Deficient (DD), some possibly as Lower Risk (near threatened). The old Indeterminate (I) category was also included in the summary; most of these would also now appear as DD or LR:nt. Around 2,000 K and I species were listed in 1994.

There were 2,114 vertebrates listed as Endangered (E), Vulnerable (V), or Rare (R) in 1994; these categories correspond loosely with the threatened group of categories (CR, EN, and VU) in the new system (a number of former Rare species will not now meet criteria for threatened status); so the 1994 figure may be compared fairly directly with a total of 3,314 threatened vertebrate species in 1996, an increase of 1,200 species. As noted above, all the world's known mammal species have been assessed for 1996, and this group, with 631 more species in the threatened categories (as equated above) in 1996 as compared with 1994, account for a significant part of the increase. The number of birds considered threatened (as above) has increased by around 680, a difference due to use of the new category system and a number of nomenclatural changes. Changes in the reptiles, amphibians, and fishes are far smaller: increases of 39, 5, and 104, respectively. All these differences are of course net differences between totals in 1994 and 1996, and do not reveal the pattern of change between categories. including movement in and out of the threatened group of categories.

### Extinction

# How Many Species have Recently Become Extinct and Where are they Found?

Extinction is a natural process. It is estimated that 95% of all species that ever existed are now extinct (Sepkoski 1995). However, this process of extinction has occurred over a very long time-scale (3.5 billion years) and despite extinctions, there has been a general trend of increasing species richness (WCMC 1992; May et al. 1995).

From the fossil record it is possible to determine the

Table 4
Recorded Number of Extinctions\*

	Extinct	Extinct in the Wild	Total
Mammals	86	3	89
Birds	104	4	108
Reptiles	20	1	21
Amphibians	5	0	5
Fishes	81	11	92
Molluscs	230	9	239
Crustaceans	9	1	10
Insects	72	1	73
Other invertebrates	4	0	4
Total	611	30	

\*Does not include species that went extinct more than 400 years ago.

average life-span of a species. This is thought to be 5-10 million years. If there are 5-10 million extant species, the background extinction rate should be about one species per year (May et al. 1995). While the exact number of species that are being lost per day or year is uncertain, it is clear that current extinction rates are very much higher than would be expected. Even the number of documented extinctions over the last 400 years (611) exceeds background estimates. This is alarming, because the number of documented extinctions is without doubt a gross underestimate of the number of species that have been lost over the past 400 years.

This gross underestimate is because most species have not been described, and of the species that have been catalogued, only extinctions of the best-known species have been documented over any length of time (mammals, birds, and molluscs). Also, as stated earlier, the status of the great majority of species remains unknown.

Table 4 shows that 86 documented mammal extinctions (1.8% of the total number of mammals) have occurred over the past 400 years. Roughly, 23% of these extinctions have occurred in Australia and 23% in the West Indies. The greatest number of extinctions has been among the rodents and bats, 46 and 13 species respectively. These orders are also the two largest and have the largest number of threatened species. It is inter-

esting to note that of all the mammal orders, primates have the fourth largest number of threatened species, but no documented extinction yet.

Over the same time period there have been 104 documented bird extinctions (1% of the total number of birds), 20% of which occurred in Mauritius, 18% in the United States (mostly Hawaiian islands), and 14% in New Zealand. Other geopolitical units with large numbers of bird extinctions are Reunion, Australia, and French Polynesia. This list clearly demonstrates that the majority of bird extinctions has taken place on islands. The largest number of extinctions (32) is in the largest order, Passeriformes. Other orders with large numbers of extinct species are Psittaciformes (13), Gruiformes (13), and Columbiformes (10), all of which are in the top five orders with the largest number of threatened species. It is interesting to note that while Galliformes have the third highest number of threatened species, only one is Extinct and one Extinct in the Wild.

Mollusc extinctions have been more thoroughly monitored than any other invertebrate group. However, records of documented extinctions only go back to the mid-19th century (WCMC 1992). Gastropods account for the majority of recent documented mollusc extinctions, most of which are in the order Stylommatophora. An extremely high proportion of the now extinct Stylommatophora were endemic to oceanic islands. All recent recorded bivalve extinctions have occurred in freshwater environments and have been from the order Unionoida. Given that there has been little attempt to document the extinctions of most invertebrate groups for any period of time, one can only guess how large the extinction list would be if these species, which account for more than 95% of all animals, were thoroughly documented and monitored.

### **Concluding Remarks**

The vast number of threatened species listed in this document and the high proportion of threatened species in the two classes that have been comprehensively assessed, indicate that a significant proportion of the world's fauna is threatened with extinction. Eleven percent of all birds and 25% of all mammals are believed to be threatened. If either one of these classes is representative of the proportion of other life forms that are threatened, the future status of biodiversity looks very bleak. While the 5,205 species listed as threatened in this document is alarmingly high, it is important to recognize that less than 10% of the 1.7 million documented species have been evaluated, and that the 1.7 million documented species represent a relatively small proportion of all species believed to exist on this planet. Thus, it is reasonable to believe that the 5,205 threatened species is a small indicator of a much larger global phenomenon of biodiversity loss. Given the current state of knowledge, when future generations look back at the 20th century and try to make sense of the lack of commitment to preserving biodiversity, many reasons may be cited, but ignorance of the magnitude of the issue will not be a valid justification for inaction.

### Acknowledgements

I would like to thank Simon Stuart, Georgina Mace, Mariano Gimenez Dixon, Brian Groombridge, Elodie Hudson, and Elizabeth McCance for their helpful comments in the preparation of this analysis.

## References

- Collar, N.J., Crosby, M.J., and Stattersfield, A.J. 1994.
  Birds to Watch 2: The World List of Threatened Birds.
  (BirdLife Conservation Series No. 4). BirdLife International, Cambridge, UK.
- Collar, N.J., Gonzaga, L.P., Krabbe, N., Madrono Nieto, A., Naranjo, L.G., Parker, T.A., and Wedge, D.C. 1992. Threatened Birds of the Americas: the ICBP/IUCN Red Data Book. International Council for Bird Preservation, Cambridge, UK.
- Daugherty, C.H., Cree, A., Hay, J.M., and Thompson, M.B. 1990. Neglected taxonomy and continuing extinctions of tuatara (*Sphenodon*). *Nature* 347:177-179.
- DeSalle, R. and Birstein, V.J. 1996. PCR identification of black caviar. *Nature* 381: 197-198.
- Duellman, W.E. 1993. Amphibian Species of the World: additions and corrections. Special Publication No. 21, University of Kansas Museum of Natural History, Lawrence, Kansas.
- Eschmeyer, W.N. 1990. Catalog of the Genera of Recent Fishes. California Academy of Sciences, San Francisco, California.
- Fitter, R., and Fitter, M. (eds). 1987. *The Road to Extinction*. IUCN, Gland, Switzerland.
- Frost, D.R. 1985. Amphibian Species of the World: A Taxonomic and Geographical Reference. Allen Press Inc. and the Association of Systematics Collections, Lawrence, Kansas.
- Groombridge, B. (ed). 1993. 1994 IUCN Red List of Threatened Animals. IUCN Gland, Switzerland and Cambridge, UK.
- Hammond, P.M. 1995. The current magnitude of biodiversity. *In:* Heywood, V. H., (ed) Global Biodiversity Assessment. Cambridge University Press, Cambridge.
- Hanski, I., Clobert, J. and W. Reid. 1995. Ecology of Extinction. *In:* Heywood, V. H., (ed) *Global Biodiversity Assessment*. Pp. 232-244. Cambridge University Press, Cambridge, UK.
- Hudson, E. and Mace, G. (eds). 1996. Marine Fish and the IUCN Red List of Threatened Animals. Report of a workshop held in collaboration with WWF and IUCN at the Zoological Society of London, April 29th-May 1st, 1996.
- Iverson, J.B. 1992. A Checklist with Distribution Maps of the Turtles of the World. Second edition. Published by the author, Richmond, Indiana.

- King, F.W. and Burke, R.L. 1989. Crocodilian, Tuatara, and Turtle Species of the World: A Taxonomic and Geographical Reference. The Association of Systematics Collections, Lawrence, Kansas.
- Mace, G.M. and Lande, R. 1991. Assessing extinction threats: toward a reevaluation of IUCN threatened species categories. *Conservation Biology* 5: 148-157.
- Mace, G. M., Collar, N., Cooke, J., Gaston, K., Ginsberg, J., Leader-Williams, N., Maunder, M., and Milner Gulland, E.J. 1992. The development of the new criteria for listing species on the IUCN Red List. *Species* 19: 16-22.
- Margulis, L. and Schwartz, K.V. 1988. Five Kingdoms: an Illustrated Guide to the Phyla of Life on Earth. 2nd edition. W.H. Freeman and Company, New York, New York.
- Master, L.L. 1991. Assessing threats and setting priorities for conservation. *Conservation Biology* 5: 559-563.
- May, R.M., Lawton, J.H., and Stork, N.E. 1995. Assessing extinction rates. Pages 1-24 in Lawton, J.H. and May, R.M. (eds). Extinction Rates. Oxford University Press, Oxford, UK.
- Messel, H., King, F.W., and Ross, J.P. 1992. Crocodiles: An Action Plan For Conservation. IUCN/SSC, Gland. Switzerland.
- Morony, J.J., Bock, W.J., and Farrand, J. 1975. Reference List of the Birds of the World. Department of Ornithology, American Museum of Natural History, New York, New York.
- Parker, S.B. 1982. Synopsis and Classification of Living Organisms. McGraw-Hill, New York, New York.
- Ponds, J.A. and Crump, M.L. 1994. Amphibian Declines and Climate Disturbance: the Case of the Golden Toad and the Harlequin Frog. Conservation Biology 8: 72-85.
- Rand McNally and Co. 1992. *The New Cosmopolitan World Atlas.* Rand McNally, Chicago, Illinois.
- Scott, P., Burton, J.A. and Fitter, R. 1987. Red Data Books: the historical background. Pages 1-5 in Fitter, R. and Fitter, M. (eds). *The Road to Extinction*. IUCN, Gland, Switzerland.
- Seddon, M. in prep. National Museum of Wales, Cardiff, U.K.
- Sepkoski, J. J. 1995. Large scale history of Biodiversity. In: Heywood, V. H., (Ed) Global Biodiversity Assessment. Cambridge University Press, Cambridge.

- Sibley, C.G. and Monroe, B.L. 1990. *Distribution and Taxonomy of Birds of the World*. Yale University Press, New Haven, Connecticut.
- Sibley, C.G. and Monroe, B.L. 1993. A Supplement to Distribution and Taxonomy of Birds of the World. Yale University Press, New Haven, Connecticut.
- Wake, D.B. 1991. Declining Amphibian Populations. *Science* 253: 860.
- Wilson, D.E. and Reeder, D.M. (eds). 1993. *Mammal Species of the World: a taxonomic and geographic reference*. 2nd edition. Smithsonian Institution Press, Washington, D.C. and London, UK.
- World Conservation Monitoring Centre, Groombridge,B. (ed). 1994. *Biodiversity Data Sourcebook*. World Conservation Press, Cambridge, UK.
- World Conservation Monitoring Centre. 1992. *Global Biodiversity: Status of the Earth's Living Resources*. Chapman & Hall, London.
- Wyman, R.L. 1990. What's Happening to the Amphibians? *Conservation Biology* 4: 350-353.

## **Data Tables**

Data Table 1 Status Category Summary for all Classes and Orders

Order	EX	EW	Subtotal	CR	ΕN	VU	Subtotal	LR:cd	LR:nt	DD
Monotremata	0	0	0	0	1	0	1	0	0	
Didelphimorphia	0	0	0	3	3	15	21	0	18	0 5
Paucituberculata	0	0	0	0	0	1	1	0	0	0
Microbiotheria	0	0	0	0	0	1	1	0	0	0
Dasyuromorphia	1	0	1	0	6	10	16	0	5	10
Peramelemorphia	3	0	3	0	1	3	4	0	0	7
Notoryctemorphia	0	0	0	0	2	0	2	0	0	0
Diprotodontia	6	0	6	2	15	17	34	1	21	11
Xenarthra	0	0	0	0	3	5	8	Ó	2	6
Insectivora	6	0	6	37	48	67	152	0	5	6
Scandentia	0	0	0	0	2	4	6	0	0	0
Dermoptera	0	0	0	0	0	1	1	0	0	0
Chiroptera	13	0	13	26	32	173	231	2	210	43
Primates	0	0	0	13	32 29	54	231 96	3		
Carnivora	3	1	4	4	29 24	37		4	37	22
Cetacea	0	0	0	2	24 6	37 6	65 <b>1</b> 4		11	19
Sirenia	1	0	1	0	0	4		14	1	38
Proboscidea	0	0	0	0	2		4	0	0	0
Perissodactyla	1	1	2	4	4	0	2	0	0	0
Hyracoidea	0	0	0	0	0	3	11	1	1	0
Artiodactyla	5	1	6	_		3	3	0	0	0
Pholidota	0	0	0	9 0	28	33	70	45	32	6
Rodentia	46	0	46	66	0	0	0	0	4	0
Lagomorpha	1	0	1	3	98	166	330	5	243	33
Macroscelidea	0	0	0		8	5	16	0	8	3
Macroscelluea	U	U	U	0	3	4	7	0	0	0
Subtotal	86	3	89	169	315	612	1096	75	598	209
Class Aves										
Order										
Struthioniformes	1	0	4	0	0		^		_	
Rheiformes	4 0	0	4 0	0	0	0	0	0	0	0
Casuariiformes	2	0	2	0	0	0	0	0	2	0
Apterygiformes	0	0	0	_	0	2	2	0	1	0
Tinamiformes	0	0		0	0	3	3	0	0	0
Sphenisciformes	0	0	0	2	0	5	7	0	5	1
Podicipediformes		_		0	0	5	5	0	2	0
Procellariiformes	2 1	0	2	2	1	1	4	0	1	0
Pelecaniformes	•	0	1	11	6	15	32	0	11	4
Ciconiiformes	1	0	1	1	0	12	13	0	7	1
Anseriformes	6 6	0	6	6	7	8	21	0	14	0
Allacillotties	0	U	6	4	2	19	25	0	10	0

Order	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Falconiformes Galliformes Gruiformes Charadriiformes Columbiformes Psittaciformes Cuculiformes Strigiformes Caprimulgiformes Apodiformes Trogoniformes Coraciiformes Piciformes Passeriformes	2 1 13 4 10 13 1 4 0 1 0 0 1 3 2	0 1 1 0 1 1 0 0 0 0 0	2 2 14 4 11 14 1 4 0 1 0 0 1 32	4 12 7 4 13 9 1 4 3 8 0 3 2 72	8 10 17 8 8 28 3 5 1 7 1 5 4 114	19 49 30 22 34 52 6 17 3 20 1 17 8 356	31 71 54 34 55 89 10 26 7 35 2 25 14	0 0 1 1 1 0 0 0 0 0 0	44 35 13 25 45 40 9 15 10 25 3 22 34 502	2 1 4 0 0 0 2 3 6 4 0 2 0 3 6
Subtotal	104	4	108	168	235	704	1107	11	875	66
Class Reptilia  Order Crocodylia Rhynchocephalia Sauria Serpentes Testudines	0 0 11 3 6	0 0 1 0	0 0 12 3 6	4 0 15 12 10	3 0 15 13 28	3 1 66 25 58	10 1 96 50 96	0 0 0 0	0 0 23 9 47	3 0 35 13 23
Subtotal	20	1	21	41	59	153	253	1	79	74
Class Amphibia	_									
<b>Order</b> Anura Caudata	5 0	0	5 0	15 3	23 8	50 25	88 36	1	17 8	35 7
Subtotal	5	0	5	18	31	75	124	2	25	42
Class Cephalaspidomorphi	<b>i</b> -									
Order Petromyzontiformes	1	0	1	0	1	2	3	0	5	3
Subtotal	1	0	1	0	1	2	3	0	5	3
Class Elasmobranchii	_									
Order Hexanchiformes Orectolobiformes Lamniformes Carchariniformes Squaliformes	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 1	0 0 1 1 0	1 0 3 2 1	1 0 4 4	0 0 0 0	0 0 0 0	0 1 0 0

## Data Table 1 Continued

Order	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Pristiformes	0	0	0	0	4	0	4	0	0	0
Rajiformes	0	0	0	0	0	0	0	0	0	1
Myliobatiformes	0	0	0	0	1	0	1	0	0	0
Subtotal	0	0	0	1	7	7	15	0	0	2
Class Actinopterygii										
Order										
Acipenseriformes	0	0	0	6	11	8	25	0	2	0
Osteoglossiformes	0	0	0	0	1	0	1	0	2	1
Clupeiformes	0	0	0	0	2	2	4	0	0	8
Cypriniformes	17	1	18	41	36	114	191	7	30	68
Characiformes	0	0	0	0	1	0	1	0	0	6
Siluriformes	1	0	1	8	7	22	37	0	4	24
Salmoniformes	5	0	5	8	6	22	36	0	6	22
Percopsiformes	0	0	0	1	0	3	4	0	0	0
Gadiformes	0	0	0	1	0	2	3	0	0	0
Ophidiiformes	0	0	0	0	0	7	7	0	0	1
Batrachoidiformes	0	0	0	0	0	5	5	0	0	0
Lophiiformes	0	0	0	1	0	0	1	0	0	0
Atheriniformes	1	0	1	6	5	31	42	0	8	28
Cyprinodontiformes	10	5	15	18	20	25	63	0	3	11
Beloniformes	0	0	0	2	3	8	13	0	1	2
Gasterosteiformes	0	0	0	1	0	2	3	0	0	4
Syngnathiformes	0	0	0	1	0	36	37	0	0	11
Synbranchiformes	0	0	0	0	1	0	1	0	0	4
Scorpaeniformes	1	0	1	3	1	5	9	0	0	2
Perciformes	45	5	50	59	30	138	227	5	40	53
Pleuronectiformes	0	0	0	0	1	1	2	0	0	0
Tetraodontiformes	0	0	0	0	0	3	3	0	0	5
Subtotal	80	11	91	156	125	434	715	12	96	250
Class Sarcopterygii										
Order										
Coelacanthiformes	0	0	0	0	1	0	1	0	0	0
Subtotal	0	0	0	0	1	0	1	0	0	0
Class Echinoidea										
Order										
Echinoida	^	0	0	0	•	^	_	_		
EUNI10Ida	0	0	0	0	0	0	0	0	1	0
Subtotal	0	0	0	0	0	0	0	0	1	0

### Class Arachnida

Order	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Araneae	0	0	0	0	1	7	8	0	1	6
Opiliones	0	0	0	Ō	Ö	1	1	0	Ö	0
Pseudoscorpionida	0	0	0	0	0	1	1	0	Ō	1
Subtotal	0	0	0	0	4	0	10	0		_
Subiolai	0	U	U	U	1	9	10	0	1	7
Class Chilopoda										
Order										
Scolopendromorpha	0	0	0	0	0	1	1	0	0	0
Subtotal	0	0								
Subiolai	0	0	0	0	0	1	1	0	0	0
Class Crustacea										
Order										
Amphipoda	4	0	4	6	5	56	67	0	0	0
Anaspidacea	0	0	0	0	0	4	4	0	Ō	Ō
Anomopoda	0	0	0	0	0	8	8	0	0	0
Anostraca	0	0	0	5	10	10	25	1	1	1
Calanoida	1	0	1	4	0	47	51	0	0	19
Conchostraca	0	0	0	0	0	4	4	0	0	0
Cyclopoida	1	0	1	1	0	6	7	5	0	0
Decapoda	1	0	1	24	48	96	168	0	0	7
Halocyprida	0	0	0	1	0	0	1	0	0	0
Harpacticoida Isopoda	0 0	0	0 1	0 7	0 9	18 22	18 38	3 0	0	1
Mictacea	0	0	0	1	0	0	38 1	0	0	1 0
Misophrioida	0	0	0	2	0	0	2	0	0	0
Myodocopida	0	0	0	0	Ö	1	1	0	0	0
Mysidacea	0	Ō	Ō	2	Ö	Ö	2	0	0	Ö
Notostraca	0	0	0	0	1	0	1	0	0	0
Podocopida	2	0	2	1	0	8	9	0	0	0
Thoracica	0	0	0	0	0	0	0	0	0	2
Subtotal	9	1	10	54	73	280	407	9	1	31
Class Insecta										
Order										
Anoplura	0	0	0	1	0	0	1	0	0	0
Blattaria	0	0	0	0	0	0	0	0	0	0
Coleoptera	17	0	17	10	15	26	51	0	3	0
Collembola	0	0	0	0	0	0	0	0	0	0
Dermaptera	0	0	0	1	0	0	1	0	0	0
Diptera	3	0	3	1	2	1	4	0	0	0
Ephemeroptera Grylloblattaria	2	0	2 0	0	0	1 1	1 1	0	0	0
Ступоріацапа	0	U	U	0	0	1	j	U	U	0

## Data Table 1 Continued

Order	EX	EW	Subtotal	CR	EN	νυ	Subtotal	LR:cd	LR:nt	DD
Hemiptera	0	0	0	0	0	0	0	0	0	0
Homoptera	2	0	2	0	0	0	0	0	3	0
Hymenoptera	0	0	0	3	0	142	145	0	7	1
Lepidoptera	38	0	38	7	36	116	159	0	46	25
Mantodea	0	0	0	0	0	0	0	0	1	0
Mecoptera	0	0	0	0	0	0	0	0	0	0
Neuroptera	0	0	0	0	0	0	0	0	0	0
Odonata	2	0	2	13	55	39	107	0	17	11
Orthoptera	2	1	3	8	8	49	65	3	0	2
Phasmatoptera	1	0	1	0	0	0	0	0	0	0
Plecoptera	1	0	1	0	0	2	2	0	0	1
Thy <b>s</b> anura	0	0	0	0	0	0	0	0	0	0
Trichoptera	4	0	4	0	0	0	0	0	0	0
Zoraptera	0	0	0	0	0	0	0	0	0	0
Subtotal	72	1	73	44	116	377	537	3	77	40
Class Merostomata										
Order										
Xiphosura	0	0	0	0	0	0	0	0	1	3
·										
Subtotal	0	0	0	0	0	0	0	0	1	3
Classs Onychophora										
Order										
Onychophora	3	0	3	1	3	2	6	0	1	1
Subtotal	3	0	3	1	3	2	6	0	1	1
Class Hirudinea										
Order										
Arhynchobdellae	0	0	0	0	0	0	0	0	1	0
Subtotal	0	0	0	0	0	0	0	0	1	0
Class Oligochaeta										
Order										
Haplotaxida	0	0	0	1	0	4	5	0	1	0
παρισταλίσα						4	5	U	1	U
Subtotal	0	0	0	1	0	4	5	0	1	0

Class	Pol	ych	aeta
-------	-----	-----	------

Order	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Not-specified Eunicida	0 0	0 0	0 0	1 0	0 0	0	1 0	0 0	0 0	0
Subtotal	0	0	0	1	0	0	1	0	0	1
Class Bivalvia										
Order Ostreoida	0	0	0	0	0	0	0	0	0	1
Unionoida Veneroida	12 0	0 0	12 0	81 0	22 0	7 4	110 4	1 4	61 1	4 0
Subtotal	12	0	12	81	22	11	114	5	62	5
Class Gastropoda										
Order	•			_						
Archaeogastropoda Basommatophora	2 1	0	2 1	7 12	1 5	2 18	10 35	0	1 11	24 6
Mesogastropoda	21	0	21	48	89	181	318	3	23	192
Neogastropoda	0	0	0	0	0	4	4	0	3	22
Stylommatophora	192	9	201	109	95	235	439	13	134	297
Subtotal	216	9	225	176	190	440	806	16	172	541
Class Enopla										
Order										
Hoplonemertea	0	0	0	0	0	2	2	0	1	3
Subtotal	0	0	0	0	0	2	2	0	1	3
Class Turbellaria										
Order Tricladida	1	0	1	0	0	0	0	0	0	0
Subtotal	1	0	1	0	0	0	0	0	0	0
Class Anthozoa										
Order										
Actiniaria	0	0	0	0	0	1	1	0	0	1
Gorgonacea	0	0	0	0	0	1	1	0	0	0
Subtotal	0	0	0	0	0	2	2	0	0	1

Data Table 2 Status Category Summary by Major Taxonomic Group

Class	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Mammalia	86	3	89	169	315	612	1096	75	598	209
Aves	104	4	108	168	235	704	1107	11	875	66
Reptilia	20	1	21	41	59	153	253	- 11		
	5	0						1	79	74
Amphibia	5	-	5	18	31	75	124	2	25	42
Cephalaspidomorphi	1	0	1	0	1	2	3	0	5	3
Elasmobranchii	0	0	0	1	7	7	15	0	0	2
Actinopterygii	80	11	91	156	125	434	715	12	96	250
Sarcopterygii	0	0	0	0	1	0	1	0	0	0
Echinoidea	0	0	0	0	0	0	0	0	1	0
Arachnida	0	0	0	0	1	9	10	0	1	7
Chilopoda	0	0	0	0	0	1	1	0	0	0
Crustacea	9	1	10	54	73	280	407	9	1	31
Insecta	72	1	73	44	116	377	537	3	77	40
Merostomata	0	0	0	0	0	0	0	0	1	3
Onychophora	3	0	3	1	3	2	6	0	1	1
Hirudinea	0	0	0	0	0	0	0	0	1	0
Oligochaeta	0	0	0	1	0	4	5	0	1	0
Polychaeta	0	0	0	1	0	0	1	0	0	1
Bivalvia	12	0	12	81	22	11	114	5	62	5
Gastropoda	216	9	225	176	190	440	806	16	172	541
Enopla	0	0	0	0	0	2	2	0	1	3
Turbellaria	1	0	1	0	0	0	0	0	0	0
Anthozoa	0	0	0	0	0	2	2	0	0	1

Data Table 3
Threatened Species: Country Totals by Taxonomic Group

Africa	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
Country	_					
Algeria	15	8	1	0	1	11
Angola	17	13	5	0	Ö	6
Benin	9	1	2	0	0	0
Botswana	5	7	0	0	0	0
Burkina Faso	6	1	1	0	0	0
Burundi	5	6	Ö	0	0	3
Cameroon	32	14	3	1	26	4
Cape Verde	1	3	3	Ó	1	0
Central African Republic	11	2	1	0	0	0
Chad	14	3	1	0	0	1
Comoros	3	6	2		1	4
	10	3	2	0		
Congo Côte d'Ivoire	16				0	1
		12	4	1	0	1
Djibouti	3	3	2	0	0	0
Egypt	15	11	6	0	0	1
Equatorial Guinea	12	4	2	1	0	2
Eritrea	6	3	3	0	0	0
Ethiopia	35	20	1	0	0	4
Gabon	12	4	3	0	0	1
Gambia	4	1	1	0	0	0
Ghana	13	10	4	0	0	0
Guinea	11	12	3	1	0	3
Guinea-Bissau	4	1	3	0	0	1
Kenya	43	24	5	0	20	15
Lesotho	2	5	0	0	1	1
Liberia	11	13	3	1	0	2
Libya	11	2	3	0	0	0
Madagascar	46	28	17	2	13	14
Malawi	7	9	0	0	0	8
Mali	13	6	1	0	0	0
Mauritania	14	3	3	0	0	0
Mauritius	4	10	6	0	0	32
Mayotte	0	2	2	0	0	1
Morocco	18	11	2	0	1	7
Mozambique	13	14	5	0	2	7
Namibia	11	8	3	1	3	1
Niger	11	2	1	0	0	1
Nigeria	26	9	4	0	0	1
Réunion	2	3	4	0	0	17
Rwanda	9	6	0	0	0	2
São Tomé & Príncipe	3	9	2	0	0	2
Senegal	13	6	7	0	0	0
Seychelles	2	9	4	4	0	3
Sierra Leone	9	12	3	0	0	4
Somalia	18	8	2	0	3	1
Julialia			_	-		

## Data Table 3 Continued

	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
St Helena	0	9	1	0	7	2
Sudan	21	9	3	0	0	1
Swaziland	5	6	0	0	0	0
Tanzania	33	30	4	0	19	46
Togo	8	1	3	0	0	0
Tunisia	11	6	2	0	0	5
Uganda	18	10	1	0	28	10
Western Sahara	7	1	2	0	0	0
Zaire	38	26	3	0	1	45
Zambia	11	10	0	0	0	6
Zimbabwe	9	9	0	0	0	2
Antarctica						
Carratar						
Country Falkland Islands	0	1	0	0	0	0
French Southern Territories	0	3	0	0	0	0
South Georgia	0	1	0	0	0	0
South Georgia	U	1	U	U	U	O
Asia						
Country					_	
Afghanistan	11	13	1	1	0	1
Armenia	4	5	3	0	0	6
Azerbaijan	11	8	3	0	5	6
Bahrain	1	1	0	0	0	0
Bangladesh	18	30	13	0	0	0
Bhutan	20	14	1	0	0	1
British Indian Ocean Territory	0	0	2	0	0	0
Brunei	9	14	4	0	2	0
Cambodia	23	18	9	0	5	0
China	75 3	90	15	1	28	4
Cyprus		4 5	3		0	1
Georgia	10		7	0	3	9
Hong Kong India	0 75	14 73	1	0	0 4	1
Indonesia	75 128		16 19	3		22
		104		0	60	29
Iran	20 7	14 12	8	2 0	7 2	3
Iraq Israel	13	8	2 5			2
Japan	29	33	8	0 10	0 7	10 45
Jordan	7	33 4	1	0	0	
Kazakhstan	15	15	1	1	5	3 4
Korea, North	7	19	0	0	0	1
Notea, Notes	,	13	U	U	U	

	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
Korea, South	6	19	0	0	0	1
Kuwait	1	3	2	Ō	0	0
Kyrgyzstan	6	5	1	0	0	3
Laos	30	27	7	0	4	0
Lebanon	5	5	2	0	0	1
Malaysia	42	34	14	0	14	3
Maldives	0	1	2	0	0	0
Mongolia	12	14	0	0	0	3
Myanmar	31	44	20	0	1	2
Nepal	28	27	5	0	0	1
Oman	9	5	4	0	3	1
Pakistan	13	25	6	0	1	0
Philippines	49	86	7	2	26	18
Qatar	0	1	2	0	0	0
Russia	31	38	5	0	13	26
Saudi Arabia	9	11	2	0	0	1
Singapore	6	9	1	0	1	1
Sri Lanka	14	11	8	0	8	2
Syria	4	7	3	0	0	3
Taiwan	10	13	3	0	6	1
Tajikistan	5 ~	9	1	0	1	2
Thailand	34	45	16	0	14	1
Turkey	15	14	12	2	18	9
Turkmenistan	11	12	2	0	5	3
Ukraine	15	10	2	0	12	13
United Arab Emirates	3	4	2	0	1	0
Uzbekistan	7	11	0	0	3	1
Viet Nam	38	47	12	1	3	0
Yemen	5	13	2	0	0	2
Europe	_					
Country						
Albania	2	7	1	0	7	3
Andorra	0	0	0	0	0	2
Austria	7	5	1	0	7	41
Belarus	4	4	0	0	0	6
Belgium	6	3	0	0	1	13
Bosnia and Herzegovina	10	2	0	1	6	6
Bulgaria	13	12	1	0	8	7
Croatia	10	4	0	1	20	8
Czech Republic	7	6	0	0	6	17
Denmark	3	2	0	0	0	10
Estonia	4	2	0	0	1	3
Faeroe Islands	1	0	0	0	0	0
Finland	4	4	0	0	1	8
France	13	7	3	2	3	61
Germany	8	5	0	0	7	29
Gibraltar	1	1	0	0	0	2 9
Greece	13	10	6	1	16	9

## Data Table 3 Continued

	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
Hungary	8	10	1	0	11	26
Iceland	1	0	0	0	0	0
Ireland	2	1	0	0	1	2
Italy	10	7	4	4	9	41
Latvia	4	6	0	0	1	6
Liechtenstein	0	1	0	0	0	4
Lithuania	5	4	0	0	1	5
Luxembourg	3	1	0	0	0	4
Macedonia	10	3	1	0	4	2
Malta	0	2	0	0	0	3
Moldova	2	7	1	0	9	5
Monaco	0	0	0	0	0	0
Netherlands	6	3	0	0	1	9
Norway	4	3	0	0	1	8
Poland	10	6	0	0	2	13
Portugal	13	7	0	1	9	67
Romania	16	11	2	0	11	21
Slovakia	8	4	0	0	7	20
Slovenia	10	3	0	1	5	38
Spain	19	10	6	3	10	57
Sweden	5	4	Ō	0	1	13
Switzerland	6	4	0	0	4	25
United Kingdom	4	2	0	Ō	1	10
Yugoslavia	12	8	1	0	13	19
North and Central America						
Country						
Anguilla	0	0	5	0	0	0
Antigua and Barbuda	0	1	5	0	0	0
Aruba	1	1	2	0	0	1
Bahamas	4	4	7	0	1	1
Barbados	0	1	2	0	0	0
Belize	5	1	5	0	4	1
Bermuda	0	2	1	0	0	25
Canada	7	5	3	1	13	11
Cayman Islands	0	1	2	0	0	1
Costa Rica	14	13	7	1	0	9
Cuba	9	13	7	0	4	3
Dominica	1	2	4	0	0	0
Dominican Republic	4	11	10	1	0	2
El Salvador	2	0	6	0	0	1
Greenland	2	0	0	0	0	0
Grenada	0	1	4	0	0	0
Guadeloupe	5	0	6	0	0	1
Guatemala	8	4	9	0	0	8

	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
Haiti	4	11	6	1	0	2
Honduras	7	4	7	Ö	0	2
Jamaica	4	7	8	4	0	5
Martinique	0	2	5	0	0	1
Mexico	64	36	18	3	86	40
Montserrat	1	0	5	0	0	0
Netherlands Antilles	1	1	6	0	0	0
Nicaragua	4	3	7	0	0	2
Panama	17	10	7	0	1	2
Puerto Rico	3	11	9	3	Ó	1
St Kitts and Nevis	0	1	5	0	0	Ö
St Lucia	0	3	6	0	0	0
St Vincent	1	2	4	0	0	0
Trinidad and Tobago	1	3	5	0	0	0
Turks and Caicos Islands	0	3	4	0	0	0
USA	35	50	28	24	123	594
Virgin Islands (British)	1	2	6	1	0	0
Virgin Islands (US)	0	2	5	ó	0	0
	_					
Oceania						
Country						
American Samoa	2	2	2	0	0	4
Australia	58	45	37	25	37	281
Christmas Island	0	3	2	0	0	0
Cocos (Keeling) Islands	0	3	0	0	0	0
Cook Islands	0	6	2	0	0	0
Federated States of Micronesia	ι 6	6	2	0	0	4
Fiji	4	9	6	1	0	2
French Polynesia	0	22	2	0	3	29
Guam	2	3	2	0	1	6
Kiribati	0	4	2	0	0	1
Marshall Islands	0	1	2	0	0	1
Nauru	0	2	0	0	0	0
New Caledonia	5	10	3	0	0	11
New Zealand	3	44	11	1	8	15
Niue	0	1	1	0	0	0
Norfolk Island	0	8	2	0	0	12
Northern Marianas	1	7	2	0	0	3
Palau	3	2	2	0	0	4
Papua New Guinea	57	31	10	0	13	11
Pitcairn Islands	0	5	0	0	0	5
Solomon Islands	20	18	4	0	0	5
Tokelau	0	1	2	0	0	0 1
Tonga	0	2	3	0 0	0	1
Tuvalu	0	1	2		0	0
US Minor Pacific Islands	0	1	2 3	0 0	0	1
Vanuatu	3	6 0	0	0	0	0
Wallis and Futuna Islands	0	6	2	0	0	1
Western Samoa	2	O	۷	U	U	,

# Data Table 3 Continued

	Mammals	Birds	Reptiles	Amphibians	Fishes	Invertebrates
South America						
Country						
Argentina	27	41	5	5	1	11
Bolivia	24	27	3	0	0	1
Brazil	71	103	15	5	12	34
Chile	16	18	1	3	4	0
Colombia	35	64	15	0	5	0
Ecuador	28	53	12	0	1	23
French Guiana	9	1	8	0	0	0
Guyana	10	3	8	0	0	1
Paraguay	10	26	3	0	0	0
Peru	46	64	9	1	0	2
Suriname	10	2	6	0	0	0
Uruguay	5	11	0	0	0	1
Venezuela	24	22	14	0	5	i
Unknown	0	0	0	0	0	0

Data Table 4
Extinct, Threatened, and Other Species: Country Totals by Status Category

Africa	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
Country										
Algeria	1	0	1	4	6	26	36	4	10	11
Angola	0	0	0	2	17	22	41	20	35	12
Benin	0	0	0	0	3	9	12	9	12	6
Botswana	0	0	0	1	3	8	12	25	10	2
Burkina Faso	0	0	0	1	2	5	8	9	9	2
Burundi	0	0	0	0	2	12	14	9	15	5
Cameroon	0	0	0	19	18	43	80	12	64	13
Cape Verde	1	0	1	1	3	4	8	0	0	0
Central African Republic	0	0	0	0	5	9	14	12	25	4
Chad	0	0	0	2	6	11	19	11	12	5
Comoros	0	0	0	6	5	5	16	0	7	0
Congo	0	0	0	1	7	8	16	3	32	8
Côte d'Ivoire	0	0	0	2	11	21	34	9	31	9
Djibouti	0	U	0	2	1	5	8	4	4	2
Egypt	0	0	0	4	9	20	33	4	12	8
Equatorial Guinea	0	0	0	1	9	11	21	1	29	7
Eritrea	0	0	0	1	2	9	12	5	6	1
Ethiopia	0	0	0	10	12	38	60	20	43	7
Gabon	0	0	0	3	6	11	20	5	30	10
Gambia	0	0	0	0	2	4	6	10	14	4
Ghana	0	0	0	2	6	19	27	8	40	7
Guinea	0	0	0	4	9	17	30	10	24	7
Guinea-Bissau	0	0	0	2	2	5	9	9	14	2
Kenya	1	0	1	21	27	59	107	27	49	11
Lesotho	0	0	0	2	0	7	9	9	9	0
Liberia	0	0	0	3	9	18	30	1	30	8
Libya	0	0	0	4	6	6	16	1	8	6
Madagascar	5	0	5	20	29	71	120	2	30	16
Malawi	0	0	0	1	10	13	24	18	24	3
Mali	0	0	0	1	6	13	20	10	14	5
Mauritania	0	0	0	4	5	11	20	7	9	5
Mauritius	44	1	45	11	14	27	52	2	5	7
Mayotte	5	0	5	2	1	2	5	0	0	0
Morocco	0	0	0	7	4	28	39	4	11	14
Mozambique	0	0	0	4	13	24	41	23	34	7
Namibia	1	0	1	3	8	16	27	23	25	3
Niger	0	0	0	1	5	9	15	10	6	5
Nigeria	0	0	0	2	13	25	40	13	47	10
Réunion	17	0	17	5	5	16	26	0	2	2
Rwanda	0	0	0	1	4	12	17	10	26	4
São Tomé & Príncipe	0	0	0	5	1	10	16	0	6	28
Senegal	0	0	0	3	8	15	26	12	22	6
Seychelles	3	0	3	7	4	11	22	2	2	1
Sierra Leone	0	0	0	3	8	17	28	6	38	6
Somalia	0	0	0	5	8	19	32	14	22	6

## Data Table 4 Continued

	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR:cd	LR:nt	DD
South Africa	10	0	10	23	41	141	205	33	91	17
St Helena	24	0	24	4	2	13	19	0	3	0
Sudan	0	0	0	6	10	18	34	19	30	8
Swaziland	0	0	0	2	1	8	11	23	4	0
Tanzania	0	0	0	14	58	60	132	29	51	51
Togo	0	0	0	0	4	8	12	10	20	6
Tunisia	0	0	0	3	3	18	24	3	9	8
Uganda	0	0	0	12	19	36	67	19	49	8
Western Sahara	0	0	0	3	4	3	10	1	3	0
Zaire	0	0	0 0	8 2	48 7	57	113 27	21 20	77	21
Zambia Zimbabwe	0	0	0	1	, 5	18 14	20	20 24	26 18	3
Zimbabwe	U	U	U	•	5	14	20	24	10	3
Antarctica										
Country										
Falkland Islands	1	0	1	0	0	1	1	0	6	4
French Southern Territories	1	0	1	1	0	2	3	0	3	3
South Georgia	0	0	0	0	0	1	1	0	0	0
Asia										
Country	_	_		_	_					
Afghanistan	0	0	0	0	5	22	27	2	19	8
Armenia Azerbaijan	0	0	0 0	2 1	1 5	15 27	18 33	1 3	17	8 11
Bahrain	0	0	0	0	0	21	33 2	0	20 2	2
Bangladesh	0	0	0	3	17	41	61	1	48	8
Bhutan	0	0	0	1	11	24	36	0	35	2
British Indian Ocean Territory	Ö	0	Ö	1	1	0	2	2	0	2
Brunei	0	0	0	2	6	21	29	0	40	8
Cambodia	0	0	0	8	18	29	55	0	33	7
China	2	1	3	19	46	148	213	5	161	41
Cyprus	0	0	0	1	3	7	11	2	8	5
Georgia	0	0	0	4	6	24	34	3	22	16
Hong Kong	0	0	0	1	5	10	16	0	10	2
India	0	0	0	15	42	136	193	6	148	32
Indonesia	5	0	5	27	72	241	340	6	246	100
Iran	0	0	0	3	12	39	54	3	26	16
Iraq	0	1	1	0	2	23	25	1	15	5
Israel	3	0	3	4	10	22	36	2	19	8
Japan Jordan	13	0	13	18	55	59	132	7	40	73
Jorgan Kazakhstan	0	1	1 0	0	4	11	15	1	10	3
Nazanistaii	U	U	U	1	6	34	41	3	29	14

	EX	EW	Subtotal	CR	EN	vu	Subtotal	LR:cd	LR:nt	DD
Korea, North	0	0	0	3	6	18	27	3	13	2
Korea, South	0	0	0	2	5	19	26	3	17	2
Kuwait	0	1	1	1	1	4	6	0	3	2
Kyrgyzstan	0	0	0	0	3	12	15	1	6	4
Laos	0	0	0	7	15	46	68	0	57	14
Lebanon	0	0	0	1	1	11	13	2	9	6
Malaysia	0	0	0	12	25	70	107	3	93	24
Maldives	0	0	0	1	1	1	3	2	0	1
Mongolia	0	1	1	0	4	25	29	1	20	2
Myanmar	0	0	0	10	19	69	98	3	108	20
Nepal	0	0	0	3	14	44	61	2	58	7
Oman	0	0	0	2	7	13	22	1	4	4
Pakistan	0	0	0	2	10	33	45	2	36	8
Philippines	2	0	2	42	54	92	188	6	80	16
Qatar	0	0	0	1	1	1	3	0	0	2
Russia	3	0	3	6	25	82	113	10	66	44
Saudi Arabia	1	1	2	3	4	16	23	5	15	7
Singapore	0	0	0	0	6	12	18	3	5	5
Sri Lanka	0	0	0	7	18	18	43	10	27	10
Syria	0	1	1	2	5	10	17	2	15	7
Taiwan	0	0	0	3	8	22	33	3	30	5
Tajikistan	0	0	0	0	3	15	18	0	11	2
Thailand	1	1	2	14	25	71	110	3	97	32
Turkey	0	0	0	13	16	41	70	3	39	44
Turkmenistan	0	0	0	1	6	26	33	1	14	13
Ukraine	0	0	0	2	7	43	52	5	37	33
United Arab Emirates	0	0	0	1	3	6	10	1	2	3
Uzbekistan	0	0	0	1	4	17	22	1	11	6
Viet Nam	1	0	1	17	25	59	101	2	81	19
Yemen	0	1	1	5	3	14	22	2	13	2
Europe										
Country										
Albania	0	0	0	3	1	16	20	0	21	17
Andorra	0	0	0	0	0	2	2	0	0	0
Austria	2	0	2	8	15	38	61	5	42	30
Belarus	0	0	0	0	2	12	14	4	22	8
Belgium	0	0	0	2	1	20	23	3	24	10
Bosnia and Herzegovina	0	0	0	0	1	24	25	2	17	9
Bulgaria	0	0	0	2	4	35	41	2	40	33
Croatia	1	0	1	1	4	38	43	2	20	22
Czech Republic	0	0	0	1	2	33	36	5	32	18
Denmark	1	0	1	0	2	13	15	4	15	8
Estonia	0	0	0	1	1	8	10	2	17	10
Faeroe Islands	0	0	0	0	0	1	1	0	1	0
Finland	0	0	0	1	2	14	17	4	23	12
France	2	0	2	6	5	78	89	4	45	22
Germany	3	0	3	2	4	43	49	6	38	28
Gibraltar	0	0	0	0	0	4	4	1	1	1

## Data Table 4 Continued

	EX	EW	Subtotal	CR	EN	vu s	ubtotal	LR:cd	LR:nt	DD
Greece	0	0	0	7	4	44	55	3	39	34
Hungary	0	0	0	2	6	48	56	4	37	23
Iceland	1	0	1	0	0	1	1	0	1	1
Ireland	0	0	0	1	1	4	6	3	6	5
Italy	1	0	1	6	6	63	75	5	47	21
Latvia	0	0	0	0	1	16	17	2	22	10
Liechtenstein	0	0	0	0	0	5	5	1	4	0
Lithuania	0	0	0	0	2	13	15	4	23	11
Luxembourg	0	0	0	1	1	6	8	1	10	2
Macedonia	0	0	0	0	0	20	20	1	19	3
Malta	0	0	0	1	0	4	5	0	5	7
Moldova	0	0	0	0	4	20	24	1	21	24
Monaco	0	0	0	0	0	0	0	0	1	0
Netherlands	0	0	0	2	0	17	19	3	24	7
Norway	0	0	0	1	1	14	16	5	18	8
Poland	0	0	0	1	5	25	31	6	37	16
Portugal	3	0	3	15	10	72	97	8	26	7
Romania	0	0	0	3	7	51	61	5	39	34
Slovakia	0	0	0	0	2	37	39	5	37	16
Slovenia	0	0	0	0	4	53	57	2	22	12
Spain	2	0	2	9	16	80	105	10	68	18
Sweden	0	0	0	1	2	20	23	5	24	14
Switzerland	0	0	0	2	0	37	39	5	40	14
United Kingdom	1	0	1	2	1	14	17	4	17	9
Yugoslavia	1	0	1	4	5	44	53	2	40	31
North and Central America										
Country										
Anguilla	1	0	1	1	3	1	5	0	2	0
Antigua and Barbuda	0	0	0	2	2	2	6	0	3	0
Aruba	0	0	0	2	0	3	5	0	0	0
Bahamas	2	0	2	3	5	9	17	0	7	1
Barbados	1	0	1	1	1	1	3	0	3	0
Belize	0	0	0	1	5	10	16	0	18	2
Bermuda	0	0	0	26	1	1	28	0	0	1
Canada	5	0	5	4	4	32	40	5	14	10
Cayman Islands	4	0	4	1	1	2	4	0	5	0
Costa Rica	0	0	0	4	16	24	44	0	46	4
Cuba	7	0	7	10	13	13	36	0	20	1
Dominica	0	0	0	1	2	4	7	0	5	0
Dominican Republic	8	0	8	4	8	16	28	0	18	1
El Salvador	0	0	0	2	4	3	9	0	12	2
Greenland	1	0	1	0	0	2	2	1	1	1
Grenada	0	0	0	2	3	0	5	0	0	0
Guadeloupe	4	0	4	1	8	3	12	0	7	0

	EX	EW	Subtotal	CR	ΕN	VU S	ubtotal	LR:cd	LR:nt	DD
Guatemala	1	0	1	2	18	9	29	0	38	5
Haiti	9	0	9	2	6	16	24	0	20	2
Honduras	2	0	2	2	9	9	20	0	31	2
Jamaica	4	0	4	7	7	14	28	0	13	3
Martinique	6	0	6	2	4	2	8	0	5	0
Mexico	22	6	28	51	90	106	247	3	110	21
Montserrat	0	0	0	2	4	0	6	0	7	0
Netherlands Antilles	0	0	0	1	4	3	8	0	3	0
Nicaragua	0	0	0	1	7	8	16	0	34	8
Panama	0	0	0	2	11	24	37	0	55	4
Puerto Rico	5	0	5	6	10	11	27	0	8	2
St Kitts and Nevis	0	0	0	1	3	2	6	0	2	0
St Lucia	1	0	1	2	5	2	9	0	7	0
St Vincent	0	0	0	2	3	2	7	0	2	0
Trinidad and Tobago	0	0	0	2	4	3	9	1	11	1
Turks and Caicos Islands USA	0 177	0 3	0 180	2 212	3	2	7	0	2	0
	0	0			150	492	854	16	184	213
Virgin Islands (British) Virgin Islands (US)	1	0	0 1	3 3	3 2	4 2	10 7	0	1	0 0
Virgin Islands (US)	,	-	,	3	2	2	,	U	'	U
Oceania										
Country										
American Samoa	1	0	1	1	6	3	10	3	1	2
Australia	35	0	35	42	118	323	483	11	176	61
Christmas Island	1	0	1	0	0	5	5	0	1	1
Cocos (Keeling) Islands	0	0	0	0	0	3	3	0	0	0
Cook Islands	14	0	14	2	1	5	8	1	1	1
Federated States of Micron	esia 2	0	2	8	6	4	18	4	5	53
Fiji	1	0	1	5	6	11	22	3	9	1
French Polynesia	62	9	71	26	13	17	56	2	1	1
Guam	3	1	4	4	5	5	14	3	2	49
Kiribati	0	0	0	1	3	3	7	3	0	1
Marshall Islands	0	0	0	1	1	2	4	3	0	3
Nauru	0	0	0 4	0	0	2	2	0 3	0 1	1 3
New Caledonia New Zealand	4	0	4 21	5 7	12 9	12 66	29 82	1	23	12
Niue	20 0	1 0	0	0	1	1	2	0	0	1
Norfolk Island	8	0	8	2	4	16	22	0	0	2
Northern Marianas	0	0	0	5	2	6	13	3	3	11
Palau	1	0	1	4	3	4	11	4	4	54
Papua New Guinea	1	0	i	12	25	85	122	4	61	54
Pitcairn Islands	Ö	0	Ö	0	0	10	10	1	0	0
Solomon Islands	3	0	3	8	11	28	47	4	28	3
Tokelau	0	0	0	1	1	1	3	2	0	1
Tonga	1	Ö	1	1	3	2	6	3	2	1
Tuvalu	0	0	0	1	1	2	4	3	0	1
US Minor Pacific Islands	1	0	1	1	1	1	3	1	0	0
Vanuatu	0	0	0	1	2	10	13	3	5	1
Wallis and Futuna Islands	0	0	0	0	0	0	0	0	1	0
Western Samoa	0	0	0	2	3	6	11	3	3	1

## Data Table 4 Continued

	EX	EW	Subtotal	CR	EN	VU Su	ubtotal	LR:cd	LR:nt	DD
South America										
Country										
Argentina	2	0	2	6	20	64	90	1	91	15
Bolivia	0	0	0	4	11	40	55	2	71	10
Brazil	4	1	5	35	64	141	240	7	159	37
Chile	0	0	0	5	5	32	42	1	25	70
Colombia	3	0	3	16	35	68	119	1	123	15
Ecuador	4	0	4	7	23	87	117	1	92	15
French Guiana	0	0	0	3	6	9	18	0	26	6
Guyana	0	0	0	2	6	14	22	1	31	5
Paraguay	1	0	1	4	13	22	39	0	58	3
Peru	0	0	0	10	24	88	122	2	122	21
Suriname	0	0	0	2	5	11	18	0	29	4
Uruguay	0	0	0	1	6	10	17	0	17	7
Venezuela	0	0	0	7	21	38	66	1	79	10
Unknown	1	0	1	0	0	0	0	0	0	0

## **Guest Essays**

# Application of IUCN Red List Categories on a Regional Scale

by Ulf Gärdenfors

### Introduction

The new IUCN Red List Categories (IUCN 1994) were developed primarily for application on the global scale, i.e. for judging the extinction risk of the whole species (or other taxon). Most countries concerned with compiling Red Lists will probably adopt the new categories in one form or another. However, by doing so, some problems may arise when the population of a species within a country (or other considered region) is only a part of a larger population. Furthermore, because the categories only consider extinction risks, there may also be other criteria that, from a national perspective, should be considered in order to develop conservation priorities.

Thus, there is a need to develop guidelines for applying the new categories at national or other regional levels in order to achieve a standardized application. To cope with the issue, IUCN has organized workshops, so far in Gland, Switzerland (March 1995; IUCN 1995) and in Cambridge, England (December 1995; Gärdenfors 1996). The process will continue, resulting in general recommendations from IUCN.

In this paper I will identify some of the conceptual problems that may arise when applying the IUCN Red List categories on a subglobal scale.

### **Problems at Regional Level**

The IUCN (1994) categories of threat are defined by one of five criteria (A-E; see the section entitled The New IUCN Categories and Criteria in this book). The quantitative thresholds of the criteria were set roughly to correspond to each other in reflecting the extinction risk of taxa.

When applying these criteria on a national or other kind of regional level, there are few problems, so long as the population of the species to be assessed is isolated from other conspecific populations, or is endemic. The extinction risk for an isolated population is the same irrespective of whether it constitutes the only population of the species in the world, or if there are other totally isolated conspecific populations. But, if the target population constitutes only a part of a larger population, the quantitative thresholds in criteria A-D (and even E, depending on how the analysis is made) might not accurately reflect the extinction risk. Also, a global extinction

is final, while an extinction from a country may later be followed by a recolonization. While the new system has a clear definition for species that are Extinct (EX) or Extinct in the Wild (EW), it lacks a definition for Regionally Extinct (RE) species. The time frame considered when creating the definition of RE will effect the listings.

The time frame is also important when considering the categories Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) on a regional level. When assessing the prospects for the next 10 years, for example, a species may face an extinction risk in a country of more than 50% (CR). However, if these prospects are assessed over a period of 100 years the extinction risk for the same species might still be 50% (then corresponding to VU), because there are interactions with populations outside the country.

### **Hypothetical Cases**

In Figure 1 the species is represented in the country only by a marginal part of a larger distribution area. The extinction risk within the country may be less than what the criteria A-D(-E) applied on the national part of the population suggest (compared to when applied on a global level), because if the species tends to die out within the country, new individuals from neighboring countries may move in (rescue effect). However, in rare instances, the reverse situation might be the case. If the marginal population is not self-sustaining and depends on regular immigration from the more central parts of the geographic range, the extinction risk within the country could be higher than is suggested by criteria A-D(-E), if something threatens the central population. In both cases, however, the extinction risk depends on the adopted time frame. Over a short time perspective the species may face a high extinction risk, but in a longer perspective there is a good possibility of recolonization and survival.

In the next case (Figure 2), the population in the country is geographically separated from other populations. If there is no flow of individuals between the populations, the new IUCN criteria are applicable, because populations outside the country do not affect the extinction risk within the country. If, on the other hand, there is a source-sink situation with a regular inflow of individuals, we have a similar situation to that shown in Figure 1. Again, the extinction risk depends on the time frame. In the case of an isolated self-sustaining population, the extinction risk may be low over a short time span, but

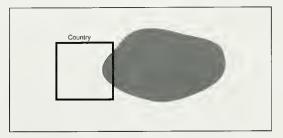


Figure 1.

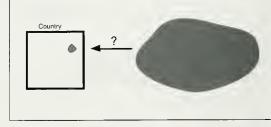


Figure 2.

very high over a longer time span, while the reverse may be the case in the source-sink situation.

### Proposals on a Regional Scale

The obstacles to applying the new IUCN Red List criteria on a national level, as presented above, may seem very difficult to address, but I think they can be managed. The majority of threatened species are so because they have small and isolated populations. If they do not have a high dispersal ability, the application of the IUCN criteria is straightforward. The problems will mainly arise among highly mobile organisms, such as birds, larger mammals, certain insects, many marine organisms, and maybe cryptograms with easily dispersed spores. The problems will of course be more pronounced in countries surrounded by other countries than in those surrounded by sea or other barriers preventing dispersal.

Conceptually, one could possibly cope with the impact of neighboring populations by quantifying the flow of individuals (or diaspores) across the borders (IUCN 1995) and include this in a metapopulation model. However, in reality, we often lack such data. If we do have such data and are able to include it into a quantitative analysis, we can use criterion E. Because of the possibility of regional extinction, as well as the problems with the time frame, we must then add a passage to the definition of the E criterion of categories CR-VU. The current definition of CR under criterion E is:

Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or 3 generations, whichever is the longer

At a regional level, this criterion could read:

Quantitative analysis showing the probability of regional extinction, that will persist for at least 100 years from now, is at least 50% within 10 years or 3 generations, whichever is the longer.

In the majority of cases we lack such data and the solution must be to evaluate the population within the country against the IUCN criteria A-D, starting with the assumption that the national population is the only one in the world. Then, one should check the situation of the species against a list to determine whether or not any factors influence its extinction risk. Such a checklist should include at least the following items:

- Does the national/regional population have any obvious contact with populations outside the borders? What is the distance to the nearest population? Are there any effective barriers preventing dispersal to and from neighboring populations?
- Is the species capable of long-distance dispersal?
   Is it known to do so?
- How abundant is the species in neighboring regions? Are the populations there stable, increasing or decreasing? Are there any important threats to those populations?
- Are there any known differences in local adaptation between the national and foreign populations, i.e. is it probable that the foreign populations are adapted to survive within the country?
- What is the environmental (including climatological) situation within one's own country/region for the species? Is the national population self-sustaining (has it shown a positive reproduction rate over the years) or is it dependent on immigration for its longterm survival?
- Are environmental conditions in the country such that immigrating specimens are able to establish or has the species disappeared because these prerequisites were not fulfilled?
- If the species becomes extinct in the country, what are the probabilities for recolonization within 100 years?

If an evaluation of these questions indicates that foreign populations affect the extinction risk of the national population in such a way that it is lower or higher than the A-D criteria suggest, the threat category should be adjusted downwards or upwards. Such a movement must be indicated, e.g. by giving the category met by the global criteria within parenthesis. Thus EN (VU) would indicate that the species met the criteria for VU, but was moved upwards (probably a very rare situation) to EN, while EN (CR) indicates that it has been moved downwards (much more likely) from CR.

In the case where there is not enough data for such an evaluation, or the result is uncertain, the species should be placed in the category met by the global criteria.

It is worth noting that a neighboring population more often will affect the national category when the criteria B1, B3 and D are met (no observation of decline) than when criteria A, B2 and C are fulfilled (a decline has been observed). This is because if there is an observed decline, the decline happens in spite of any influence from populations outside the country (though the decline might have been even bigger without such an influence). Once again, the time frame is problematic, since there can be a decline in the country that, later on, can be balanced by immigration.

### Other Red List Categories

The three Lower Risk (LR) subcategories, conservation dependent (cd), near threatened (nt) and least concern (lc), can be treated as defined by IUCN (1994) after having taken above mentioned considerations for CR-VU. The categories Data Deficient (DD) and Not Evaluated (NE) can be applied at national level without any adaptations.

As indicated earlier in this paper, it may be necessary to define a new category for species extinct only within a country or another region. An extinction of an endemic species in a country is equal to a global extinction, but when a more widespread species becomes extinct within a country, it still survives in other parts of the world. These two different kinds of extinction deserve to be recognized and distinguished in national Red Lists. This has already been done in some countries, and national extinction has been described by words such as Extirpated or Vanished. However, Vanished may be perceived as too weak a word, and Extirpated has the double disadvantage of alluding to deliberate human-induced eradication (which rarely is the case) and being confused with the category Extinct when abbreviated. The most appropriate term would probably be Regionally Extinct (RE).

### **Conservation Priority**

The IUCN Red List categories do not allow for any considerations other than extinction risks. However, there may also be other criteria that are important when com-

ing to the decision about national conservation measures (Sparrowe and Wight 1975, Nieme 1982, Millsap *et al.* 1990, Daniels *et al.* 1991, Master 1991, Forey *et al.* 1994, Gärdenfors in press). As suggested in the IUCN guidelines (IUCN 1994, p. 8, section 11), and also by Avery *et al.* (1995), two important criteria could be global status and proportion of the global population or range that occurs within the region.

The global scale may not be the most appropriate for comparison with a national scale. A species scattered in fragmented populations over the entire Holarctic region is probably genetically considerably differentiated and the populations in North America and Eastern Europe most probably are not interchangeable. As a general rule, the most appropriate scale would probably be the continental or comparable biogeographic regional scale. The proportion of the international/continental population and probability of recolonization can be given on a scale from 0 to 1 (where the intervals for population percentages depend on the area of the country in relation to the continental area, Figure 3).

In a priority-setting system, many other criteria could be of interest, such as ecological importance, historical importance, taxonomic and genetic importance, importance to people, etc. Most of these, however, turn out to be problematic to apply, either conceptually or in practice (Gärdenfors in press) and are consequently difficult to include in a formalized priority-setting system. However, in cases where any such criterion is obviously important, it could be remarked upon separately.

Taking into consideration the points made above, a national Red List could have an appearance as in Figure 4. It is not obvious how to weigh the individual criteria against each other. Maybe the best solution is to avoid any such a priority weighting, and allow for different weighting when different situations and issues come up.

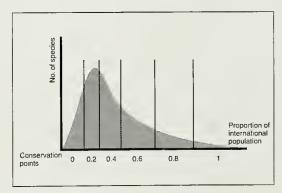


Figure 3.

Species	National Red List Category	IUCN Criteria	Continental Red List Category	Proportion of Contin. Pop.	Remark
Aus australis	EN	A2d, B2c + 3d	CR	0.8	Formerly distrib. all over the country
Bus borealis	nt (VU)	D2	_	0	over the country
Cus communis	nt		_	0.4	A key-stone species
Dus domesticus	VU	E	_	0.2?	
Eus Ephemericus	RE		VU	0	
Fus frugivorus	EN(CR)	A1a, c	nt	0.2	Monotypic genus

Figure 4.

### How to Proceed?

In order to develop guidelines for applying the IUCN Red List categories at regional levels it is now necessary to produce and distribute draft guidelines and test them against a wide variety of species in many countries in different parts of the world. It is important that this procedure involves a very wide consultation of national Red List compilers from throughout the world. Hopefully IUCN will be able to adopt and publish a set of official guidelines in the near future.

### Acknowledgements

Ingemar Ahlén, Jonathan Baillie, Oskar Kindvall, Georgina Mace and Simon Stuart provided many constructive suggestions, which substantially improved this manuscript.

Ulf Gärdenfors, Ph.D. Assistant Director Swedish Threatened Species Unit P.O. Box 7002 S-750 07 Uppsala Sweden

### References

- Avery, M., Wingfield Gibbons, D., Porter, R., Tew, T., Tucker, G., and Williams, G. 1995. Revising the British Red Data List For Birds: The biological basis of UK Conservation Priorities. *Ibis* 137: 232-239.
- Daniels, R.J.R., Hegde, M., Joshi, N.V., and Gadgil, M. 1991. Assigning conservation value: a case study from India. *Conservation Biology* 5: 464-475.

- Forey, P.L., Humphries, C.J., and Vane-Wright, R.I. (eds.). 1994. Systematics and Conservation Evaluation. The Systematics Association Special Volume No. 50. Calendon Press, Oxford, UK.
- Gärdenfors, U. 1996. The regional perspective. *In:* Baillie, J., Callahan, D., and Gärdenfors, U. A closer look at the IUCN Red List Categories. *Species* 25 (December 1995): 30-36.
- Gärdenfors, U. In press. Conservation priorities for threatened species. Proceedings of the 10th International Colloquium of the European Invertebrate Survey, Saarbrücken, Germany, 4-5 July 1995.
- IUCN. 1994. IUCN Red List Categories. IUCN, Gland, Switzerland.
- IUCN. 1995. Draft guidelines for applying the IUCN Red List Categories at the national level. Results of the National Red List Workshop, Gland, Switzerland 23-24 March 1995.
- Master, L.L. 1991. Assessing threats and setting priorities for conservation. *Conservation Biology* 5: 559-563.
- Millsap, B.A., Gore, J.A., Runde, D.E., and Cerulean, S.I. 1990. Setting priorities for the conservation of fish and wildlife species in Florida. Wildl. Monogr., 111: 1-57.
- Nieme, G. J. 1982. Determining priorities in non-game management. *Loon* 54: 28-54.
- Sparrowe, R.D. and Wight, H.M. 1975. Setting priorities for the endangered species program. *Trans. North Am. Wildl. and Nat. Resour. Conf.* 40: 142-156.

# Applying the New IUCN Threatened Species Categories

by Alison J. Stattersfield

#### Introduction

BirdLife International (formerly the International Council for Bird Preservation) has had a long history of involvement in the red-listing process, taking responsibility for advising IUCN and its Species Survival Commission on matters relating to the conservation status and needs of birds. BirdLife was among the first to apply the new IUCN threatened species categories in late 1993 and early 1994 (before the criteria were published), and was the first to evaluate a complete class of species.

Bird data for the Red Lists have come from the international Red Data Books, which have been a keystone of BirdLife's research work. This program started with Vincent (1966-1971), was updated by King (1978-1979), then followed by regional treatments of Africa (Collar and Stuart 1985) and the Americas (Collar et al. 1992) (all using the old IUCN categories), and work is currently under way to assess candidates for Asia (using the new categories). Annotated global checklists, where data sources are referenced (Birds to Watch), have also been published (Collar and Andrew 1988, Collar et al. 1994; using old and new categories respectively) to keep the summary information and category allocation up-to-date, and to compensate for the time-lag caused by the detailed work necessary to produce an exhaustively researched Red Data Book.

The old IUCN system for identifying threatened species gave broad definitions for five threatened categories, of which only two directly indicated the likelihood of extinction. The new system (used to list all species in this Red List) is characterized by quantitative or clearly defined criteria, subcriteria and qualifiers, based around an evaluation of probabilities of extinction within specified time-frames. Species may qualify for one of three threatened categories depending on whether their abundance and/or range sizes, or rates of decrease in these, meet explicit numerical thresholds (see, for example, Mace 1993, Mace and Stuart 1994).

The aims of this essay are threefold. First, to draw on the experience of BirdLife's research to discuss some of the particular difficulties which were experienced in applying the new IUCN threatened species categories to birds and to outline some potential solutions. Second, to use the BirdLife data to interpret the changes between successive Red Lists using the old and new categories. And third, to suggest how the red-listing process, using the new categories, can help conservation.

### Some Problems and Solutions

One of the specific aims of the revision of the categories is to improve objectivity by providing clear guidance on how to evaluate different factors which affect the risk of extinction. For the majority of species—birds being no exception—numerical data concerning population numbers or rates of decline are lacking, or, at best, available on a site basis only (and thereby relevant to part of any population only). The preamble to the new categories therefore emphasizes the importance of attempting to classify poorly known taxa by estimating and extrapolating the current or potential threats into the future, and by allocating them a threat status by applying the precautionary principle.

Using inference in a consistent fashion, however, proved to be one of our greatest difficulties in producing the revised list for birds, for, despite the intentions of the new system, there is little guidance to help standardize this process. Indeed we found that there was considerable scope for variation in categorization of some species (using the same data) even between three people (my coauthors and 1). Given that birds are the most comprehensively studied of all the classes of animals or plants, it is likely that inconsistencies arising from the use of inference will be far greater for those assessing less well known groups with fewer numerical clues, and in circumstances where more people contribute to the evaluation process.

Another dilemma we faced was the availability and quality of other data which could have helped us make well informed inferences. Despite access to many published sources of information and expertise from BirdLife's extensive network of contacts, we found that our information on, for example, habitat loss and degradation was poor in some parts of the world. While evaluators can reasonably be expected to assemble all the appropriate species-specific material (on distribution, population, ecology etc.), they may not have access to general data concerning a species's environment (e.g. logging activities or other land-use changes past, present, and planned). We recognized that some of our assessments might be seriously affected by ignorance of such key pieces of information (see Figure 1).

Other areas of difficulty, more fully discussed in Collar *et al.* (1994), included: the indistinct division between the near threatened and least concern categories; the appropriate use of the (non-threatened) conservation dependent category where information on important extrinsic factors such as the effectiveness of certain protected areas is needed; thresholds for the Critically Endangered category which could be (perhaps too) readily met by species with naturally small ranges as a result of any evidence indicating loss of habitat, however

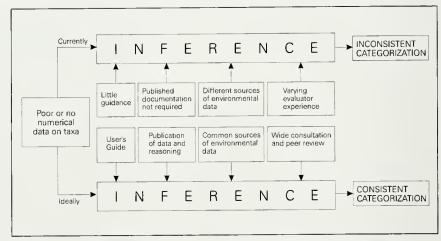


Figure 1. Some problems and solutions in applying the new IUCN threatened species categories.

slight; an apparent inequity between species with small stable populations (= not threatened) versus those with much larger ones in the same area but with declining ones elsewhere (= threatened); and the definition of location which is crucial to the interpretation of the range-size criteria (see also, for example, Baillie *et al.* 1995, Hallingbäck *et al.* 1995 for difficulties encountered in applying the categories to different faunal groups).

Many of the above problems could be diminished by more detailed guidance in the use of the criteria (and a "Users' Guide" is being prepared). This should be easier to formulate now, with many real examples, owing to the extensive collective experience of applying the categories for this Red List.

Further guidance will not, however, eliminate all the uncertainties associated with the use of inference. It is therefore vital that, where data are poor, the reasoning used to trigger certain criteria should be made as explicit as possible. Although the new system requires the inclusion of coding to indicate which criteria are judged to be met (rather than the category code alone), such notation could be misleading because there is no indication of levels of uncertainty. It is possible, because a species is classified as threatened using a system which is recognized as being more objective, to assume without question that the species meets the criteria (and has, for example, a population of less than 10,000 mature individuals) when, in fact, the original evaluation involved a highly precautionary inference derived from very slight evidence. Guesswork may therefore become fact, and judgements may not be re-evaluated from first principles in subsequent exercises. The only real solution, therefore, is to publish the species-specific and background data in detail, for example in Red Data Books, Action Plans,

standard forms which ensure that all relevant details are logged, or interactive user-friendly computer programs with a comprehensive help system specially designed for this purpose. At the very least the mammal, reptile, fish and other equivalents of *Birds to Watch* (summarizing distribution, habitat requirements, abundance, trends and threats) should be produced as the documentary basis of future Red Lists.

Publication of data will have several benefits: critical inferences will be indicated and might generate more appropriately orientated fieldwork and important new information; details of the assessment will be available for more efficient and improved re-evaluation; and the documentation will allow for wide consultation and independent peer review, to aid consistency between treatment of poorly known species in different taxonomic groups and regions of the world. In addition, the environmental knowledge which has influenced judgements will be disclosed and rendered accessible to other assessors of species with similar ranges and problems. However, it is not efficient for different evaluators repeatedly to find the same environmental information, nor are they necessarily the best people to interpret it. An invaluable supplement to the forthcoming Users' Guide, therefore, would be a common source of appropriate background data compiled and up-dated by relevant experts (see Figure 1).

### **Changes and Their Interpretation**

Given the apparently major change in the categories and their criteria, one might expect big changes in the overall numbers and types of species listed as threatened. For

birds, there has been an increase from 1,030 (Collar and Andrew 1988) to 1,111 (Collar et al. 1994). Although the net change is a relatively small one-an additional 81 species in total (= 8% increase)—more considerable flux is masked: 295 species were upgraded to threatened status (29%) and 214 species downgraded (21%). However, these changes may be attributed to four factors—the currently volatile nature of ornithological taxonomy (+81, -12), the inevitable improvement in knowledge (+157, -139), genuine changes in status (+14, -2) and changes in the criteria (+43, -61). If we assume that the first three factors are independent of the system used (accounting for 85% and 71% of the upgrades and downgrades respectively), it appears that the new categories have not radically altered the end result. It might be possible, therefore, to conclude that the old IUCN system for the classification of threatened species was adequate after all. However, as the use of inference is a key factor in the appropriate application of the new categories, the potential for misuse under the old system (where there were broad definitions only for guidance) was many times greater.

An interpretation of the changes between successive Red Lists, combined with the probabilities of extinction implicit in the new categories, allows us to make predictions of the rates of species' extinctions. Such projections have been common in both the scientific and popular literature, and have caused much debate over the reality of the so-called impending extinction spasm (see, e.g. Myers 1987). We calculate that it would take between 800 and 2,800 years for half the world's birds (4,850 species) to go extinct (Crosby et al. 1994). This is based on our categorization in Collar et al. (1994) and a dynamic projection that takes into account the likely changes in knowledge over the next 100 years and a rate of change of status equivalent to the one which we had perceived during the period 1988-1994 or worse. Under "normal" conditions, using mean survival times as illustrated from the fossil record, one would expect the natural time to extinction for half the world's birds to be around 500,000 years. While we recognize that our models (which happen to be more optimistic than others based on older data and different methodologies, e.g. Smith et al. 1993) are not necessarily realistic, they clearly draw attention to a crisis of considerable magnitude, directly attributable to the destructive activities of man.

### **Using Red Lists**

Red Lists are not an end in themselves. They provide information about the status of species, giving no indication of the conservation action which must be taken to save them from extinction.

The new guidelines state that the category of threat is

not necessarily sufficient to determine priority ranking for conservation, and that a system for such assessments would include numerous other factors such as costs, logistics, and chances of success. Although these may be addressed in Action Plans, the increasing number of threatened species joining the Red Lists means that, for most (uncharismatic) species, the only real prospect for saving them is by site protection. Thus geographical areas of overlap between the thousands of threatened species included in this Red List (by country, area, and ideally site) would represent a new and vitally important basis for assigning the biological priorities for conservation action, and help to focus resources appropriately where choices have to be made (see Collar 1994).

As a result of its Red Data Book research, BirdLife has already identified key forests for threatened Afrotropical birds (Collar and Stuart 1988) and key sites for threatened Neotropical birds (Wege and Long 1995). These studies show that many threatened species occur together in similar places and that site-based priorities can therefore be developed effectively through threatened species analysis. BirdLife's original Biodiversity Project extended this geographical approach by delimiting so-called Endemic Bird Areas (EBAs), covering the breeding ranges of all land bird species with restricted-ranges (including three-quarters of threatened species). The approach also demonstrated the importance of most of these areas for other endemic wildlife groups (ICBP 1992, Stattersfield *et al.* in prep.).

Current research at BirdLife focuses on Important Bird Areas (IBAs), which are selected on the basis of globally agreed criteria dealing with threatened species populations, importance for congregatory species, or representation of EBAs or larger biomes. The IBA initiative aims to cover the most important sites which will conserve all bird species for which a site-based approach is appropriate. IBAs have been identified for Europe (Grimmett and Jones 1989) and the Middle East (Evans 1994), and there is now a commitment to identify the majority of the world's IBAs by the year 2000. Despite the fact that evidence for congruence exists, such an approach could be adopted by colleagues working on other groups, and help to polarize attention on key sites for all plant and animal "sympatric" species.

### Conclusions

- Where numerical species data are lacking, varying experience and interpretation of the new IUCN criteria coupled with ignorance of key environmental information, will result in inconsistent categorization of species' status by different evaluators.
- 2. Consistency in categorization could be enhanced by

- a variety of measures including more detailed guidance in the use of the criteria, publication and referencing of key data, provision of sharing common sources of environmental information, greater consultation and independent peer review.
- Although differences between the bird Red Lists using the old and new criteria are relatively small, the new system establishes a framework which reduces subjectivity and renders red-listing more accountable.
- 4. Conservation efforts can be aided and influenced by a reinterpretation of the species data collated for Red Lists to identify key sites, especially those which would protect large numbers of sympatric threatened species.
- Changes between successive Red Lists could provide a useful measure of progress in the conservation of the world's biodiversity.

### Acknowledgements

This essay draws on the ideas and publications of many of my colleagues at BirdLife. I would like to thank Nigel Collar and Mike Crosby, in particular, for their encouragement and input, and also Colin Bibby, John Croxall, John Fanshawe, Adrian Long, and David Wege for helpful comments.

Alison Stattersfield BirdLife International Wellbrook Court Girton Road Cambridge CB3 0NA

#### References

- Baillie, J., Callahan, D., and Gärdenfors, U. 1995. A closer look at the IUCN Red List categories. *Species* 25: 30-36.
- Collar, N.J. and Andrew, P. 1988. *Birds to watch: the ICBP world check-list of threatened birds*. (Techn. Publ. 8). International Council for Bird Preservation, Cambridge, UK.
- Collar, N.J. and Stuart, S.N. 1985. *Threatened birds of Africa and related islands: the ICBP/IUCN Red Data Book.* International Council for Bird Preservation, and International Union for Conservation of Nature and Natural Resources, Cambridge, UK.
- —. 1988. Key forests for threatened birds in Africa. (Monogr. 3), International Council for Bird Preservation, Cambridge, UK.
- Collar, N.J., Gonzaga, L.P., Krabbe, N., Madroño Nieto,

- A., Naranjo, L.G., Parker, T.A., and Wege, D.C. 1992. *Threatened Birds of the Americas: the ICBP/IUCN Red Data Book*. International Council for Bird Preservation, Cambridge, UK.
- Collar, N.J. 1994. Red Data Books, Action Plans and the need for site-specific synthesis. Species 21-22: 132-133.
- Collar, N.J., Crosby, M.J., and Stattersfield, A.J. 1994. Birds to Watch 2: The World List of Threatened Birds. (BirdLife Conservation Series no. 4), BirdLife International, Cambridge, UK.
- Crosby, M.J., Stattersfield, A.J., Collar, N.J., and Bibby, C.J. 1994. Predicting avian extinction rates. *Biodiversity Letters* 2: 182-185.
- Evans, M.I. 1994. Important Bird Areas in the Middle East. (BirdLife Conservation Series no. 2), BirdLife International, Cambridge, UK.
- Grimmett, R.F.A. and Jones, T.A. 1989. *Important Bird Areas in Europe*. (Techn. Publ. 9), International Council for Bird Preservation, Cambridge, UK.
- Hallingbäck, T., Hodgetts, N., and Urmi, E. 1995. How to apply the new IUCN Red List categories to bryophytes. Species 24: 37-41
- ICBP. 1992. Putting biodiversity on the map: priority areas for global conservation. International Council for Bird Preservation, Cambridge, UK.
- King, W.B. 1978-1979. Red Data Book, 2: Aves. Second edition. International Union for Conservation of Nature and Natural Resources, Morges, Switzerland.
- Mace, G.M. 1993. The status of proposals to redefine the IUCN threatened species categories. Guest essay in B. Groombridge, ed. 1994 IUCN Red List of Threatened Animals. International Union for Conservation of Nature and Natural Resources, Gland, Switzerland and Cambridge, UK.
- Mace, G.M. and Stuart, S. 1994. Draft IUCN Red List categories. *Species* 21-22: 13-24.
- Myers, N. 1987. The extinction spasm impending: synergisms at work. *Conservation Biology* 1: 14-21.
- Smith, F.D.M., May, R.M., Pellew, R., Johnson, T.J., and Walter, K.S. 1993. Estimating extinction rates. *Nature* 364: 494-496.
- Stattersfield, A.J., Crosby, M.J., Long, A.J., and Wege, D.C. In prep. Global directory of Endemic Bird Areas. (BirdLife Conservation Series), BirdLife International Cambridge, UK.
- Vincent, J. 1966-1971. Red Data Book, 2: Aves. International Union for Conservation of Nature and Natural Resources, Morges, Switzerland.
- Wege, D.C. and Long, A.J. 1995. Key Areas for threatened birds in the Neotropics. (BirdLife Conservation Series no. 5), BirdLife International, Cambridge, UK.

## **Index to Classes**

(	Cho	r	da	ta

 Mammalia
 Mammals
 3, 129, 135, 177, 193, 219, 241, 245

 Aves
 Birds
 29, 131, 146, 179, 197, 242, 245

 Reptilia
 Reptiles
 58, 132, 164, 182, 199, 234, 242, 246

 Amphibia
 Amphibians
 66, 132, 166, 182, 201, 235, 243, 246

 Cephalaspidomorphi
 Fishes: lampreys
 69, 167, 183, 201, 246

Elasmobranchii Fishes: sharks, rays 69, 201

Actinopterygii Fishes: bony fishes 70, 132, 167, 183, 202, 235, 243 246

Sarcopterygii Fishes: Coelacanth 88

Cnidaria

Anthozoa Corals, sea anemones 128, 217

**Platyhelminthes** 

Turbellaria Flatworms 192, 256

Nemertina

Enopla Nemertine worms 128, 175, 217

Mollusca

 Bivalvia
 Molluscs: mussels, clams
 110, 133, 172, 187, 209, 238, 244, 255

 Gastropoda
 Molluscs: snails
 112, 133, 173, 187, 209, 238, 244, 256

Annelida

HirudineaLeeches~171OligochaetaEarthworms109, 172PolychaetaMarine bristle worms109, 209

Onychophora

Onychophora Velvet worms 109, 171, 187, 209, 255

Arthropoda

Arachnida Spiders, scorpions, etc 88, 169, 207

Chilopoda Centipedes 89

 Crustacea
 Crustaceans
 89, 132, 169, 185, 207, 237, 244, 247

 Insecta
 98, 133, 169, 185, 208, 237, 244, 247

Merostomata Horseshoe crabs 171, 209

**Echinodermata** 

Echinoidea Sea urchins, sea fans, etc 169

# **Threatened Species**

#### Class MAMMALIA

#### Order MONOTREMATA

### Family TACHYGLOSSIDAE

Zaglossus bruijni Long-beaked Echidna

EN <sup>13</sup> Alac Indonesia, Papua New Guinea

### Order DIDELPHIMORPHIA

#### Family DIDELPHIDAE

### Caluromys derbianus

VU 121 A1c
Belize, Colombia, Costa Rica,
Ecuador, El Salvador, Guatema

Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

## Caluromysiops irrupta

VU 121 B1+2c Brazil, Peru

Glironia venusta

VU 121 B1+2c Bolivia, Brazil, Ecuador, Peru

#### Gracilinanus aceramarcae

CR 121 B1+2c Bolivia

### Gracilinanus dryas

VU 121 B1+2c Venezuela

### Gracilinanus emiliae

VU 121 B1+2c Brazil

### Lestodelphys halli

VU 121 B1+2c Argentina

## Marmosa andersoni

CR <sup>121</sup> B1+2c Peru

### Marmosa xerophila

EN <sup>121</sup> B1+2c Colombia, Venezuela

#### Marmosops cracens

EN 121 B1+2c Venezuela

## Marmosops dorothea

VU 121 B1+2c

Marmosops handleyi CR 121 B1+2c

Colombia

### Monodelphis emiliae

VU 121 A1c Brazil, Peru

### Monodelphis kunsi

EN 121 A1c Bolivia, Brazil

## Monodelphis maraxina

VU 121 Alc

### Monodelphis osgoodi

VU 121 A1c Bolivia, Peru

#### Monodelphis rubida

VU 121 A1c Brazil

#### Monodelphis scalops

VU 121 A1c Brazil

#### Monodelphis sorex

VU 121 A1c Argentina, Brazil, Paraguay

#### Monodelphis theresa

VU 121 A1c Brazil, Peru

#### Monodelphis unistriata

VU 121 A1c Brazil

#### Order PAUCITUBERCULATA

### Family CAENOLESTIDAE

## Rhyncholestes raphanurus

**VU** ¹²¹ A1c Chile

### Order MICROBIOTHERIA

### Family MICROBIOTHERIIDAE

#### Dromiciops gliroides

VU 121 A1c Argentina, Chile

### Order DASYUROMORPHIA

#### Family MYRMECOBIIDAE

## Myrmecobius fasciatus

Numbat VU <sup>13</sup> Ala, D2 Australia

### Family DASYURIDAE

### Dasycercus byrnei

Kowari VU <sup>13</sup> C2a Australia

### Dasycercus cristicauda

Mulgara VU <sup>13</sup> C2a Australia

### Dasycercus hillieri

Mulgara

EN <sup>13</sup> B1+2d+3bc Australia

### Dasyurus albopunctatus

New Guinea Quoll

VU <sup>13</sup> Ala Indonesia, Papua New Guinea

### Dasyurus geoffroii

Chuditch VU <sup>13</sup> C1 Australia

### Dasyurus maculatus

Spotted-tailed Quoll
VU 13 C1+2a
Australia

#### Dasyurus spartacus

Bronze Quoll VU 13 Alc

Papua New Guinea

## Parantechinus apicalis

Dibbler EN 13 B1+2ce

Australia

### Phascogale calura

Red-tailed Phascogale EN <sup>13</sup> B1+2bd

Australia

### Planigale novaeguineae

Papuan Planigale VU <sup>13</sup> D2 Papua New Guinea

### Pseudantechinus mimulus

Carpentarian Antechinus
VU 13 D2
Australia

### Sminthopsis aitkeni

Kangaroo Island Dunnart EN <sup>13</sup> B1+2d Australia Sminthopsis butleri Carpentarian Dunnart VÛ 13 D2

Australia

Sminthopsis douglasi Julia Creek Dunnart EN 13 B1+2bd+3d

Australia

Sminthopsis psammophila

Sandhill Dunnart

EN 13 B1+2ab+3ab

Australia

Order PERAMELEMORPHIA

Family PERAMELIDAE

Isoodon auratus Golden Bandicoot

VU 13 B1+2e

Australia

Macrotis lagotis

Bilby

VU 13 C2a

Australia

Perameles bougainville Western Barred Bandicoot

EN B B1+3a Australia

Perameles gunnii

Eastern Barred Bandicoot

VU 13 A1b Australia

Order NOTORYCTEMORPHIA

Family NOTORYCTIDAE

Notoryctes caurinus

Northern Marsupial Mole

EN 13 A1c+2c

Australia

Notoryctes typhlops

Southern Marsupial Mole

EN 13 A1c+2c

Australia

Order DIPROTODONTIA

Family VOMBATIDAE

Lasiorhinus krefftii

Northern Hairy-nosed Wombat

CR 13 B1+2c, D1

Australia

Family PHALANGERIDAE

Phalanger matanim

Telefomin Cuscus

EN 13 B1+2e

Papua New Guinea

Phalanger rothschildi

Obi Cuscus

VU 13 D2 Indonesia

Phalanger vestitus

Stein's Cuscus

VU 13 A1a, B1+2a Indonesia, Papua New Guinea

Spilocuscus rufoniger

Black-spotted Cuscus

EN 13 A1d

Indonesia, Papua New Guinea

Family POTOROIDAE

Bettongia lesueur

Boodie

VU 13 D2

Australia

Bettongia tropica

Northern Bettong EN 13 B1+2c

Australia

Potorous gilbertii

Gilbert's Potoroo

CR 13 C2b, D1 Australia

Potorous longipes

Long-footed Potoroo

EN 13 B1+2c, C2a

Australia

Family MACROPODIDAE

Dendrolagus dorianus

Doria's Tree-kangaroo

VU 13 A1a

Indonesia, Papua New Guinea

Dendrolagus goodfellowi

Goodfellow's Tree-kangaroo

EN 13 Ala

Papua New Guinea

Dendrolagus matschiei

Huon Tree-kangaroo

EN 13 Alac

Papua New Guinea

Dendrolagus mbaiso

Dingiso

VU 13 A1d

Indonesia

Dendrolagus scottae

Scott's Tree-kangaroo

EN 13 A1a, B1+2a

Papua New Guinea

Dorcopsis atrata

Black Dorcopsis

EN 13 B1+2c

Papua New Guinea

Dorcopsulus macleayi

Macleay's Dorcopsis

VU 13 D2

Papua New Guinea

Lagorchestes hirsutus Rufous Hare-wallaby

VU 13 D2

Australia

Lagostrophus fasciatus Banded Hare-wallaby

VU 13 D2

Australia

Onychogalea fraenata

Bridled Nailtail Wallaby

EN 13 A1a, C1+2b

Australia

Petrogale penicillata

Brush-tailed Rock-wallaby

VU 13 C2a

Australia

Petrogale persephone

Prosperine Rock-wallaby

EN 13 B1+2a

Australia

Setonix brachyurus Ouokka

VU 13 Albce, C1

Australia

Thylogale brownii

New Guinea Pademelon VU 13 Ala

Indonesia, Papua New Guinea

Thylogale brunii

Dusky Pademelon

VU 13 A1a

Indonesia, Papua New Guinea

Thylogale calabyi

Calaby's Pademelon

EN 13 A1a, B1+2a

Papua New Guinea

Family BURRAMYIDAE

Burramys parvus

Mountain Pygmy-possum

EN 13 B1+2abcde Australia

Family PSEUDOCHEIRIDAE

Pseudocheirus occidentalis

Western Ringtail

VU 13 C2a

Australia

Pseudochirops albertisii

D'Albertis Ringtail

VU 13 A1c, D2

Indonesia, Papua New Guinea



Pseudochirops corinnae
Plush-coated Ringtail
VU 13 Ala
Indonesia, Papua New Guinea

#### Family PETAURIDAE

Dactylopsila megalura
Great-tailed Troik
VU 13 A1d, B1+2a
Indonesia, Papua New Guinea

Dactylopsila tatei
Tate's Triok
EN 13 B1+2c
Papua New Guinea
Gymnobelideus leadbeateri

Leadbeater's Possum
EN <sup>13</sup> A2c, E
Australia

Petaurus abidi Northern Glider VU <sup>13</sup> D2 Papua New Guinea

Petaurus gracilis
Mahogany Glider
EN <sup>13</sup> Alb, B1+2abc, C2a
Australia

#### Order XENARTHRA

#### Family BRADYPODIDAE

Bradypus torquatus Maned Sloth EN 61 Alcd Brazil

#### Family DASYPODIDAE

Chaetophractus nationi VU 61 Ald Argentina, Bolivia, Chile, Peru

Chlamyphorus retusus
Greater Pichi Ciego
VU 61 A1c
Argentina, Bolivia, Paraguay

Chlamyphorus truncatus Lesser Pichi Ciego EN <sup>61</sup> Alabcd Argentina

VU 61 B1+2c

Priodontes maximus

Giant Armadillo

EN 61 Alcd

Argentina, Bolivia, Brazil,

Colombia, Ecuador, French Guiana,

Guyana, Paraguay, Peru, Suriname,

Uruguay, Venezuela

Tolypeutes tricinctus
Brazilian Three-banded Armadillo
VU 61 Albcd
Brazil

#### Family MYRMECOPHAGIDAE

Myrmecophaga tridactyla
Giant Anteater
VU 61 Alcd
Argentina, Belize (ex?), Bolivia,
Brazil, Colombia, Costa Rica,
Ecuador, French Guiana, Guatemala,
Guyana, Honduras, Nicaragua,
Panama, Paraguay, Peru, Suriname,
Uruguay, Venezuela

#### Order INSECTIVORA

### Family SOLENODONTIDAE

Solenodon cubanus Cuban Solenodon EN <sup>15</sup> Alcde Cuba

Sotenodon paradoxus
Haitian Solenodon
EN 15 Alcde
Dominican Republic, Haiti

### Family TENRECIDAE

Limnogale mergulus
Aquatic Tenrec
EN % B1+2c
Madagascar
Microgale dryas
CR % B1+2c
Madagascar
Microgale gracilis
Gracile Shrew-tenrec
VU % B1+2c
Madagascar

Microgale parvula
Pygmy Shrew-tenrec
EN % B1+2c
Madagascar

Microgale principula
Greater Long-tailed Shrew-tenrec
EN % B1+2c
Madagascar

Microgale pulla
Dusky Shrew-tenrec
VU <sup>96</sup> B1+2c
Madagascar

Microgale thomasi
Thomas's Shrew-tenrec
VU % B1+2c

VU ∞ B1+20 Madagascar

Micropotamogale lamottei Nimba Otter-shrew EN % B1+2c

Côte d'Ivoire, Guinea, Liberia

Micropotamogale ruwenzorii Ruwenzori Otter-shrew EN \* B1+2c Uganda, Zaire

Potamogale velox
EN \* B1+2c
Angola, Cameroon, Central African
Republic, Chad, Congo, Gabon,
Kenya, Nigeria, Sudan, Tanzania,
Uganda, Zaire

### Family CHRYSOCHLORIDAE

Amblysomus gunningi Gunning's Golden Mole VU <sup>96</sup> B1+2c South Africa

Amblysomus julianae Juliana's Golden Mole CR <sup>96</sup> B1+2c South Africa

Chlorotalpa duthieae
Duthie's Golden Mole
VU <sup>96</sup> B1+2c
South Africa

Chlorotalpa sclateri Sclater's Golden Mole VU <sup>96</sup> B1+2c Lesotho, South Africa

Chlorotalpa tytonis Somali Golden Mole CR <sup>96</sup> B1+2c Somalia

Chrysochloris visagiei Visagie's Golden Mole CR <sup>96</sup> B1+2c South Africa

Chrysospalax trevelyani
Giant Golden Mole
EN \* B1+2c
South Africa

Chrysospalax villosus
Rough-haired Golden Mole
VU % B1+2c
South Africa

Cryptochloris wintoni
De Winton's Golden Mole
VU <sup>96</sup> B1+2c
South Africa

Cryptochloris zyli
Van Zyl's Golden Mole
CR <sup>96</sup> B1+2c
South Africa

Eremitalpa granti Grant's Golden Mole VU \* B1+2c Namibia, South Africa Family ERINACEIDAE

Hylomys hainanensis

Hainan Gymnure

EN 96 B1+2c

China

Hylomys parvus

**Dwarf Gymnure** 

CR 96 B1+2c

Indonesia

Mesechinus hughi

Hugh's Hedgehog

VU 96 B1+2c

China

Podogymnura aureospinula

Dinagat Moonrat

EN 96 B1+2c

Philippines

Podogymnura truei

Mindanao Gymnure

EN 96 B1+2c

Philippines

Family SORICIDAE

Chimarrogale hantu

Malayan Water Shrew

CR 96 B1+2c

Malaysia

Chimarrogale phaeura

Borneo Water Shrew

EN 96 B1+2c

Malaysia

Chimarrogale sumatrana

Sumatra Water Shrew

CR 96 B1+2c

Indonesia

Congosorex polli

CR 96 B1+2c

Zaire

Crocidura allex

VU 96 B1+2c

Kenya, Tanzania

Crocidura andamanensis

EN 96 B1+2c

India (Andaman & Nicobar Is)

Crocidura ansellorum

CR 96 B1+2c

Zambia

Crocidura attila

VU 96 B1+2c

Cameroon, Central African Republic,

Congo, Gabon, Zaire

Crocidura baileyi

VU 96 B1+2c

Ethiopia

Crocidura beatus

VU 96 B1+2c

Philippines

Crocidura beccarii

EN 96 B1+2c

Indonesia

Crocidura bottegoides

VU 96 B1+2c

Ethiopia

Crocidura caliginca

CR 96 B1+2c

Zaire

Crocidura canariensis

VU 96 B1+2c

Spain (Canary Is)

Crocidura congobelgica

VU 96 B1+2c

Zaire

Crocidura desperata

CR % B1+2c

Tanzania

Crocidura dhofarensis

CR 96 B1+2c

Oman

Crocidura eisentrauti

CR 96 B1+2c

Cameroon

Crocidura elgonius

VU 96 B1+2c

Kenya, Tanzania

Crocidura erica

VU 96 B1+2c

Angola

Crocidura fischeri

VU 96 B1+2c

Kenya, Tanzania

Crocidura flavescens

VU % B1+2c

South Africa

Crocidura floweri

Flower's Shrew

EN 96 B1+2c

Egypt

Crocidura foxi

VU 96 B1+2c

Benin, Ghana, Nigeria, Togo

Crocidura fumosa

VU 96 B1+2c

Kenya

Crocidura glassi

VU 96 B1+2c Ethiopia

Crocidura gracilipes

CR 96 B1+2c

Kenya?, Tanzania

Crocidura grandis EN 96 B1+2c

Philippines

Crocidura grayi

VU 96 B1+2c

Philippines

Crocidura greenwoodi

VU 96 B1+2c

Somalia

Crocidura harenna

CR 96 B1+2c

Ethiopia

Crocidura hispida

Andaman Shrew

EN 96 B1+2c

India (Andaman & Nicobar Is)

Crocidura jenkinsii

CR % B1+2c

India (Andaman & Nicobar Is)

Crocidura kivuana

VU 96 B1+2c

Zaire

Crocidura latona

VU 96 B1+2c

Zaire

Crocidura longipes

EN 96 B1+2c

Nigeria

Crocidura lucina

VU 96 B1+2c

Ethiopia

Crocidura ludia

VU 96 B1+2c Zaire

Crocidura macmillani

CR 96 B1+2c

Ethiopia

Crocidura macowi

CR 96 B1+2c

Kenya

Crocidura malayana EN 96 B1+2c

Malaysia

Crocidura mindorus

EN % B1+2c

Philippines

Crocidura miya Sri Lankan Long-tailed Shrew

EN 96 B1+2c

Sri Lanka

Crocidura monax VU 96 B1+2c

Kenya, Tanzania

Crocidura negrina CR 96 B1+2c

Philippines

Crocidura nicobarica

Nicobar Shrew EN % B1+2c

India (Andaman & Nicobar Is)



Crocidura orientalis VU 96 D2 Indonesia

Crocidura orii
Orii's Shrew
EN <sup>96</sup> B1+2c
Japan (Nansei-shoto)

Crocidura osorio VU <sup>96</sup> D2 Spain (Canary 1s)

Crocidura palawanensis VU % B1+2c Philippines

Crocidura paradoxura EN <sup>%</sup> B1+2c Indonesia Crocidura pergrisea

Pale Grey Shrew
VU % B1+2c
India
Crocidura phaeura

CR % B1+2c Ethiopia

Crocidura picea CR <sup>96</sup> B1+2c Cameroon

Crocidura pitmani VU <sup>96</sup> B1+2c Zambia

Crocidura polia CR <sup>96</sup> B1+2c Zaire

Crocidura raineyi
CR % B1+2c
Kenya

Crocidura selina EN <sup>96</sup> B1+2c Uganda

Crocidura stenocephala VU % B1+2c Zaire

Crocidura susiana EN <sup>96</sup> B1+2c Iran

Crocidura tansaniana VU <sup>96</sup> B1+2c Tanzania

Crocidura telfordi CR <sup>96</sup> B1+2c Tanzania

Crocidura tenuis VU % B1+2c Indonesia

Crocidura thomensis VU <sup>60</sup> B1+2c São Tomé & Príncipe (São Tomé) Crocidura ultima CR <sup>96</sup> B1+2c Kenya

Crocidura usambarae VU <sup>96</sup> B1+2c Tanzania

Crocidura wimmeri EN <sup>∞</sup> B1+2c Côte d'Ivoire

Crocidura xantippe VU % B1+2c Kenya, Tanzania Crocidura zimmeri

VU 96 B1+2c
Zaire

Crocidura zimmermanni VU <sup>96</sup> B1+2c Greece

Cryptotis endersi EN <sup>15</sup> B1+3d Panama

Cryptotis gracilis VU <sup>15</sup> B1+2c Costa Rica, Panama

Cryptotis hondurensis VU <sup>15</sup> B1+2c Honduras

Feroculus feroculus
Kelaart's Long-clawed Shrew
EN \*\* B1+2c
Sri Lanka

Myosorex blarina
VU % B1+2c
Uganda, Zaire

Myosorex eisentrauti
EN <sup>96</sup> B1+2c
Equatorial Guinea (Bioko)

Myosorex geata EN % B1+2c Tanzania

Myosorex longicaudatus Long-tailed Forest Shrew VU <sup>96</sup> B1+2c South Africa

Myosorex okuensis
VU 96 B1+2c
Cameroon

Myosorex rumpii CR <sup>96</sup> B1+2c Cameroon

Myosorex schalleri CR <sup>96</sup> B1+2c Zaire

Myosorex sclateri VU <sup>96</sup> B1+2c South Africa Myosorex tenuis VU <sup>96</sup> B1+2c Mozambique?, South Africa

Paracrocidura graueri CR <sup>96</sup> B1+2c Zaire

Ruwenzorisorex suncoides VU <sup>96</sup> B1+2c Burundi, Uganda, Zaire

Solisorex pearsoni
Pearson's Long-clawed Shrew
EN <sup>96</sup> B1+2c
Sri Lanka

Sorex arizonae VU <sup>72</sup> D2 Mexico, USA

Sorex cansulus
Gansu Shrew
CR \* B1+2c
China

Sorex cylindricauda Greater Stripe-backed Shrew EN <sup>96</sup> B1+2c China

Sorex hosonoi Azumi Shrew VU 96 B1+2c Japan

Sorex hydrodromus Pribilof Shrew EN \* B1+3d USA

Sorex jacksoni St Lawrence Shrew EN <sup>96</sup> B1+3d USA

Sorex kozlovi Kozlov's Shrew CR % B1+2c China [R. Dze-Chyu]

Sorex leucogaster Paramushir Shrew VU <sup>96</sup> B1+2c Russia

Sorex milleri VU <sup>72</sup> D2 Mexico

Sorex sadonis
Sado Shrew
EN <sup>96</sup> B1+2c
Japan

Sorex sclateri EN <sup>15</sup> B1+3d Mexico Sorex sinalis Dusky Shrew VU 96 B1+2c

China

Sorex stizodon EN 15 B1+3d Mexico

Soriculus salenskii Salenski's Shrew

CR 96 B1+2c China

Sudisorex norae VU 96 B1+2c

Kenya

Sudisorex polulus VU 96 B1+2c

Kenya

Suncus ater Black Shrew CR 96 B1+2c Malaysia

Suncus dayi EN % B1+2c India

Suncus fellowsgordoni EN % B1+2c Sri Lanka

Suncus hosei VU 96 B1+2c Malaysia

Suncus mertensi Flores Shrew CR 96 B1+2c Indonesia

Suncus montanus VU 96 B1+2c India, Sri Lanka

Suncus remyi Gabon Dwarf Shrew CR 96 B1+2c

Suncus zeylanicus EN % B1+2c Sri Lanka

Gabon

Sylvisarex hawelli VU 96 B1+2c Tanzania

Sylvisorex isabella VU 96 B1+2c

Cameroon, Equatorial Guinca (Bioko)

Sylvisorex morio EN % B1+2c Cameroon

Sylvisorex oriundus VU 96 B1+2c Zaire

Family TALPIDAE

Desmana moschata Russian Desman

VU 96 B1+2c Belarus, Kazakhstan, Russia, Ukraine

Euroscaptor mizura Japanese Mountain Mole VU 96 B1+2c

Japan

Euroscaptor parvidens CR 96 B1+2c

Viet Nam

Galemys pyrenaicus Pyrenean Desman VU 96 B1+2c France, Portugal, Spain

Mogera etigo EN % B1+2c Japan

Mogera tokudae Sado Mole EN % B1+2c Japan

Neoscaptor uchidai Ryukyn Mole EN % B1+2c Japan

Talpa streeti Persian Mole CR 96 B1+2c 1ran

Uropsilus investigator EN % B1+2c China

Uropsilus soricipes Chinese Shrew-Mole EN % B1+2c China

Order SCANDENTIA

Family TUPAIIDAE

Dendrogale melanura Bornean Smooth-tailed Tree Shrew VU 96 B1+2c Malaysia

Tupaia chrysogaster Golden-bellied Tree Shrew VU 96 B1+2c **Indonesia** 

Tupaia longipes Bornean Tree Shrew EN % B1+2c

Indonesia

Tupaia nicobarica Nicobar Tree Shrew EN % B1+2c India (Andaman & Nicobar Is) Tupaia palawanensis Palawan Tree Shrew

VU 96 B1+2c **Philippines** 

Urogale everetti Philippine Tree Shrew VU 96 B1+2c Philippines

Order DERMOPTERA

Family CYNOCEPHALIDAE

Cynocephalus volans Flying Lemur VU 112 Alc+2c Philippines

Order CHIROPTERA

Family PTEROPODIDAE

Acerodon humilis Talaud Fruit Bat VU 42 A2c, D2 **Indonesia** 

Acerodon jubatus Golden-capped Fruit Bat EN 42 Alcd Philippines

Acerodon leucotis VU 42 A2c Philippines

Alionycteris paucidentata VU 42 B1+2c Philippines

Aproteles bulmerae Bulmer's Fruit Bat CR 42 B1+2c Papua New Guinea

Dobsonia beauforti EN 42 B1+2c Indonesia

Dobsonia emersa VU 42 D2 Indonesia

Dobsonia peronii Western Naked-backed Fruit Bat VU 42 A1c

Indonesia

Epomophorus grandis Lesser Angolan Epauletted Fruit Bat EN 42 B1+2c

Angola, Congo

Epomops buettikoferi Buettikofer's Epauletted Fruit Bat

VU 42 A2c Côte d'Ivoire, Ghana, Guinea, Liberia, Nigeria, Sierra Leone



Haplonycteris fischeri
Fischer's Pygmy Fruit Bat
VU 42 A1c
Philippines

Latidens salimalii CR <sup>42</sup> B1+2c, D1 India

Megaerops kusnotoi Javan Tail-less Fruit Bat VU <sup>42</sup> D2 Indonesia

Melonycteris aurantius
Orange Fruit Bat
VU 42 A2c, D2
Solomon Islands

Melonycteris fardoulisi VU <sup>42</sup> A2c Solomon Islands

Micropteropus intermedius
Hayman's Epauletted Fruit Bat
VU <sup>42</sup> D2
Angola, Zaire

Myonycteris brachycephala São Tomé Collared Fruit Bat VU <sup>42</sup> B1+2c São Tomé & Príncipe (São Tomé)

Myonycteris relicta
East African Collared Fruit Bat
VU 42 A2c
Kenya, Tanzania

Neopteryx frosti
Small-toothed Fruit Bat
VU 42 A2cd
Indonesia

Notopteris macdonaldii
Long-tailed Fruit Bat
VU 42 A2d
Fiji, New Caledonia, Vanuatu

Nyctimene celaeno VU <sup>42</sup> B1+2c Indonesia

Nyctimene draconilla VU <sup>42</sup> B1+2c Indonesia, Papua New Guinea

Nyctimene malaitensis Malaita Tube-nosed Bat VU <sup>42</sup> D2 Solomon Islands

Nyctimene masalai VU <sup>42</sup> D2 Papua New Guinea

Nyctimene minutus
Lesser Tube-nosed Bat
VU 42 D2
Indonesja

Nyctimene rabori
Philippines Tube-nosed Fruit Bat
CR <sup>42</sup> A2c
Philippines

Otopteropus cartilagonodus VU <sup>42</sup> A2c Philippines

Plerotes anchietae d'Anchieta's Fruit Bat VU <sup>42</sup> A2c Angola, Zaire, Zambia

Pteralopex acrodonta
CR 42 A1c, B1+2c

Fiji Pteralopex anceps

CR <sup>42</sup> AIc Papua New Guinea, Solomon Islands

Pteralopex atrata
Cusp-toothed Fruit Bat
CR <sup>42</sup> Alc
Solomon Islands

Pteralopex pulchra CR <sup>42</sup> Alc Solomon Islands

Pteropus dasymallus
Ryukyu Flying-fox
EN <sup>42</sup> A1ce
Japan (Nansei-shoto), Taiwan (ex)

Pteropus founulus VU <sup>42</sup> B1+2c India (Andaman & Nicobar Is)

VU 42 B1+2c Vanuatu

Pteropus gilliardi
Gilliard's Flying-fox

Pteropus fundatus

VU <sup>42</sup> D2 Papua New Guinea Pteropus howensis VU <sup>42</sup> B1+2c

Solomon Islands
Pteropus insularis

Chuuk Flying-fox
CR <sup>42</sup> A1cd
Federated States of Micronesia

Pteropus leucopterus EN <sup>42</sup> A2c Philippines

Pteropus livingstonii Comoro Black Flying-fox CR <sup>42</sup> A1c+2cd, B1+2c, C2a Comoros

Pteropus mahaganus
Lesser Flying-fox
VU <sup>42</sup> B1+2c
Papua New Guinea, Solomon Islands

Pteropus mariannus
Marianas Flying-fox
EN <sup>42</sup> A1cd+2cde
Federated States of Micronesia,
Guam, Japan (Nansei-shoto),
Northern Marianas, Palau

Pteropus molossinus
Pohnpei Flying-fox
CR <sup>42</sup> B1+2ce
Federated States of Micronesia

Pteropus niger
Greater Mascarene Flying-fox
VU 42 A1d+2cd
Mauritius

Pteropus nitendiensis VU <sup>42</sup> D2 Solomon Islands

Pteropus ocularis Seram Fruit Bat VU 42 D2 Indonesia

Pteropus ornatus VU <sup>42</sup> A2c New Caledonia

Pteropus phaeocephalus
Mortlock Islands Flying-fox
CR <sup>42</sup> B1+2e
Federated States of Micronesia

Pteropus pohlei Geelvink Bay Fruit Bat VU <sup>42</sup> B1+2c Indonesia

Pteropus pselaphon Bonin Fruit Bat VU <sup>42</sup> CI Japan (Kazan-retto, Ogasawara-gunto)

Pteropus pumilus

Little Golden-mantled Flying-fox

VU 42 A2c

Indonesia, Philippines

Pteropus rodricensis Rodrigues Flying-fox CR <sup>42</sup> B1+3d Mauritius (Rodrigues)

Pteropus samoensis
Samoa Flying-fox
VU 42 Ald+2d
American Samoa, Fiji, Western
Samoa

Pteropus sanctacrucis VU <sup>42</sup> B1+2c Solomon Islands

Pteropus speciosus VU <sup>42</sup> A2cd Indonesia, Philippines Pteropus tuberculatus

VU 42 B1+2c

Solomon Islands

Pteropus voeltzkowi

Pemba Flying-fox

CR 42 C2a

Tanzania

Rousettus madagascariensis

Madagascar Rousette

 $VU^{42}$  D2

Madagascar

Rousettus spinalatus

VU 42 C2a Indonesia, Malaysia

Syconycteris carolinae

VU 42 B1+2c

Indonesia

Syconycteris hobbit

Moss-forest Blossom Bat

VU 42 B1+2c

Papua New Guinea

Family RHINOPOMATIDAE

Rhinopoma hadithaensis

VU 42 B1+2c, D2

lraq

Rhinopoma macinnesi

VU 42 A2c, D2

Ethiopia, Kenya, Somalia

Family CRASEONYCTERIDAE

Craseonycteris thonglongyai

Kitti's Hog-nosed Bat EN 42 B1+2c, C2b

Thailand

Family EMBALLONURIDAE

Balantiopteryx infusca

EN 42 B1+2c

Ecuador

Coleura seychellensis

Seychelles Sheath-tailed Bat

CR 42 B1+2cde, C2b, D1

Seychelles

Diclidurus ingens

VU 42 A2c

Brazil, Colombia, Guyana, Venezuela

Emballonura atrata

VU 42 A2c

Madagascar

Emballonura dianae

VU 42 A2c

Papua New Guinea, Solomon Islands

Emballonura furax

Greater Sheath-tailed Bat

VU 42 A2c, D2

Papua New Guinea

Emballonura semicaudata

EN 42 A2c

American Samoa, Federated States of Micronesia, Fiji, Palau, Western Samoa

Saccolaimus mixtus

VU 42 A2c

Australia, Papua New Guinea

Taphozous achates

VU 42 D2

Indonesia

Taphozous hamiltoni

VU 42 A2c

Chad, Kenya, Sudan

Taphozous hildergardeae

VU 42 A2c

Kenya, Tanzania

Taphozous kapalgensis

VU 42 A2c

Australia

Taphozous troughtoni

CR 42 Alac, B1+2abcde, D1

Australia

Family NYCTERIDAE

Nycteris javanica

VU 42 Alc

Indonesia

Nycteris major

VU 42 A2c, D2

Benin, Cameroon, Congo, Gabon,

Nycteris vinsoni

CR 42 B1+2c

Mozambique

Family MEGADERMATIDAE

Macroderma gigas

Ghost Bat

VU 42 A2c

Australia

Family RHINOLOPHIDAE

Anthops ornatus

VU 42 A2c, D2

Solomon Islands

Asellia patrizii

VU 42 A2c, D2 Eritrea, Ethiopia

Hipposideros breviceps

VU 42 D2

Indonesia

Hipposideros corynophyllus

VU 42 A2c, D2

Indonesia, Papua New Guinea

Hipposideros coxi

VU 42 D2

Malaysia

Hipposideros demissus

VU 42 A2c, D2

Solomon Islands

Hipposideros durgadasi

VU 42 B1+2c, D2

Hipposideros inexpectatus

VU 42 A2c

Indonesia

Hipposideros marisae

VU 42 A2c

Côte d'Ivoire, Guinea, Liberia

Hipposideros muscinus

VU 42 D2

Papua New Guinea

Hipposideros nequam

CR 42 B1+2c

Malaysia

Hipposideros papua

Geelvinck Bay Leaf-nosed Bat

VU 42 A2c

Indonesia

Hipposideros ridleyi

Ridley's Leaf-nosed Bat

VU 42 B1+2c

Malaysia, Singapore

Hipposideros turpis EN 42 A2c

Japan (Nansei-shoto), Thailand

Paracoelops megalotis

CR 42 B1+2c

Viet Nam

Rhinolophus capensis

VU 42 A2c, D2

Mozambique, South Africa,

Zimbabwe

Rhinolophus cognatus

VU 42 A2c, D2

India (Andaman & Nicobar Is)

Rhinolophus euryale

VU <sup>42</sup> A2c

Algeria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Egypt, France, Georgia, Greece, Hungary, Iran, Israel, Italy, Macedonia, Morocco, Portugal,

Romania, Slovakia, Slovenia, Spain, Tunisia, Turkey, Turkmenistan,

Ukraine, Yugoslavia Rhinolophus hipposideros

VU 42 A2c

Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina,

Bulgaria, Croatia, Czech Republic, Egypt, Eritrea, Ethiopia, France, Georgia, Germany, Greece, Hungary,

India, Iran, Ireland, Israel, Italy, Jordan, Lebanon, Luxembourg,

Macedonia, Morocco, Poland,



Portugal, Romania, Saudi Arabia, Slovakia, Slovenia, Spain, Sudan, Switzerland, Turkey, Turkmenistan, United Kingdom, Yugoslavia

Rhinolophus imaizumii EN <sup>42</sup> A2c, B1+2abcde Japan (Nansei-shoto)

Rhinolophus keyensis EN <sup>42</sup> C2a Indonesia

Rhinolophus mehelyi VU 42 A2c

Afghanistan, Algeria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Egypt, France, Greece, Iran, Iraq, Israel, Italy, Libya, Macedonia, Morocco, Portugal, Romania, Slovenia, Spain, Tunisia, Turkey, Yugoslavia

Rhinolophus paradoxolophus VU <sup>42</sup> B1+2c Thailand, Viet Nam

Rhinolophus rex VU 42 B1+2c

Rhinolophus subrufus VU <sup>42</sup> A2c Philippines

Rhinonicteris aurantia
Orange Leaf-nosed Bat
VU 42 Alc
Australia

Triaenops furculus VU <sup>42</sup> A2c Madagascar

Family MORMOOPIDAE

Pteronotus macleayi VU <sup>42</sup> A2c Cuba, Jamaica

Family PHYLLOSTOMIDAE

Ariteus flavescens VU 42 A2c, D2 Jamaica

Artibeus fraterculus VU <sup>42</sup> A2c Ecuador, Peru

Artibeus hirsutus VU 42 A2cd Mexico

Chiroderma doriae VU <sup>42</sup> A2c, D2 Brazil

Chiroderma improvisum EN <sup>42</sup> A2c, B1+2c Guadeloupe, Montserrat Choeroniscus periosus VU 42 D2

Colombia, Ecuador

Leptonycteris curasoae
VU <sup>42</sup> Alcd
Aruba, Colombia, El Salvador,
Guatemala, Mexico, Netherlands
Antilles, USA, Venezuela

Leptonycteris nivalis
Big Long-nosed Bat
EN 42 Alcd
Guatemala?, Mexico, USA

Lonchophylla bokermanni VU 42 A2c

Brazil

Lonchophylla dekeyseri VU <sup>42</sup> A2c Brazil

Lonchophylla handleyi VU 42 A2c, D2

Colombia, Ecuador, Peru Lonchaphylla hesperia

VU 42 A2c, D2 Ecuador, Peru

Lonchorhina fernandezi VU <sup>42</sup> A2c Venezuela

Lonchorhina marinkellei VU 42 A2c

Colombia

Macrotus californicus

VU 42 A2c

Mexico, USA

Micronycteris behnii VU <sup>42</sup> A2c Brazil, Peru

Micronycteris pusilla VU <sup>42</sup> A2c Brazil, Colombia

Musonycteris harrisoni VU <sup>42</sup> A2c Mexico

Phyllonycteris aphylla Jamaican Flower Bat EN <sup>42</sup> B1+2c Jamaica

Platalina genovensium VU <sup>42</sup> D2 Peru

Platyrrhinus chocoensis VU <sup>42</sup> A2c, D2 Colombia

Platyrrhinus recifinus VU <sup>42</sup> A2c, D2 Brazil Scleronycteris ega VU <sup>42</sup> A2c, D2 Brazil, Venezuela

Stenoderma rufum
VU <sup>42</sup> Alcd
Puerto Rico, Virgin Islands (British)

Sturnira nana VU 42 D2 Peru

Sturnira thomasi EN 42 B1+2c Guadeloupe

Tonatia carrikeri VU <sup>42</sup> A2c Bolivia, Brazil, Colombia, Peru, Suriname, Venezuela

Tonatia schulzi VU <sup>42</sup> A2c Brazil, French Guiana, Suriname

Vampyressa brocki
VU <sup>42</sup> D2
Colombia, Guyana, Peru, Suriname

Family NATALIDAE

Natalus tumidifrons

VU 42 D2

Bahamas

Family FURIPTERIDAE

Amorphochilus schnablii VU 42 A2c Chile, Ecuador (Galápagos ls), Peru

Family THYROPTERIDAE

**Thyroptera lavali** VU <sup>42</sup> B1+2c, D2 Peru

Family MYZOPODIDAE

Myzopoda aurita Sucker-footed Bat VU <sup>42</sup> A2c Madagascar

Family VESPERTILIONIDAE

Antrozous dubiaquercus VU 42 A2c, D2 Belize, Costa Rica, Honduras, Mexico

Barbastella barbastellus

VU <sup>42</sup> A2c Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, France, Georgia, Germany, Hungary, Italy, Latvia, Lithuania,

Luxembourg, Macedonia, Moldova, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Senegal?, Slovakia, Slovenia, Spain (Canary Is), Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

Chalinolobus alboguttatus VU 42 D2

Cameroon, Zaire

Chalinolobus dwyeri VU 42 A2c

Chalinolobus neocaledonicus

EN 42 B1+2c New Caledonia

Australia

Chalinolobus superbus

VU 42 D2 Côte d'Ivoire, Ghana, Zaire

Eptesicus demissus VU 42 A2c

Thailand

Eptesicus guadaloupensis EN 42 B1+2c Guadeloupe

Eptesicus innoxius VU 42 A2c

Ecuador (Galápagos Is), Peru

Eptesicus nasutus

VU 42 A2c Afghanistan, Iran, Iraq, Oman, Pakistan, Saudi Arabia, Yemen

Eptesicus platyops VU 42 D2 Equatorial Guinea, Nigeria, Senegal

Hesperoptenus doriae EN 42 B1+2c

Malaysia

Hesperoptenus gaskelli VU 42 B1+2c

Indonesia

Histiotus alienus VU 42 A2c

Brazil, Uruguay

Kerivoula agnella VU 42 D2

Papua New Guinea

Kerivoula eriophora VU 42 D2

Ethiopia

Kerivoula muscina VU 42 D2

Papua New Guinea

Kerivoula myrella VU 42 A2c

Indonesia, Papua New Guinea

Laephotis namibensis EN 42 A2c Namibia

Lasiurus castaneus

VU 42 D2

Costa Rica, French Guiana, Panama

Lasiurus ebenus

VU 42 B1+2c, D2

Brazil

Miniopterus fuscus

VU 42 A2c

Japan (Nansei-shoto)

Miniopterus robustior

EN 42 B1+2c New Caledonia

Murina grisea

EN 42 B1+2c India

Murina puta VU 42 A2c

Murina ussuriensis

EN 42 A2c North Korea, Russia, South Korea

Myotis aelleni VU 42 A2c, D2

Argentina

Myotis atacamensis VU 42 A2c, D2

Chile, Peru

Myotis bechsteini VU 42 A2c

Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Macedonia, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Yugoslavia

Myotis capaccinii Long-fingered Bat

VU 42 A2c

Algeria, Bosnia and Herzegovina, Bulgaria, Croatia, France, Greece, Iran, Iraq, Israel, Italy, Jordan, Lebanon, Macedonia, Morocco, Romania, Slovenia, Spain, Tunisia, Turkey, Uzbekistan, Yugoslavia

Myotis cobanensis CR 42 B1+2c

Guatemala

Myotis dasycneme Pond Bat

VU 42 A2c

Austria, Belarus, Belgium, China, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Kazakhstan, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Russia, Slovakia, Sweden, Switzerland, Ukraine

Myotis dominicensis VU 42 A2c, D2

Dominica, Guadeloupe

Myotis emarginatus

VU 42 A2c

Afghanistan, Algeria, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Israel, Italy, Jordan, Kazakhstan, Lebanon, Macedonia, Morocco. Netherlands, Oman, Poland, Portugal, Romania, Saudi Arabia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey, Turkmenistan, Uzbekistan, Yugoslavia

Myotis findleyi EN 42 B1+2c Mexico

Myotis grisescens

Grey Bat EN 42 Alc USA

Myotis leseuri VU 42 A2c, D2 South Africa

Myotis morrisi

VU 42 D2

Ethiopia, Nigeria, Zaire

Myotis peninsularis VU 42 Alcd

Mexico

Myotis pruinosus EN 42 B1+2c Japan

Myotis ruber

VU 42 A2c

Argentina, Brazil, Paraguay

Myotis scotti

VU 42 A2c, D2 Ethiopia

Mvotis seabrai

VU 42 A2c, D2 Angola, Namibia, South Africa

Myotis sicarius

VU 42 A2c, D2 India, Nepal

Myotis sodalis Indiana Bat

EN 42 Alc USA

Myotis stalkeri EN 42 B1+2c Indonesia



Myotis vivesi VU 42 A2c

Mexico

Myotis yesoensis VU 42 A2c Japan

Nyctalus azoreum

VU <sup>42</sup> A2c, B1+2c, D2 Portugal (Azores)

Nyctophilus heran

EN 42 B1+2c Indonesia

Nyctophilus microdon

VU 42 D2 Papua New Guinea

Nyctophilus timoriensis

VU 42 A2c

Australia, Indonesia, Papua New Guinea

Pharotis imogene

CR <sup>42</sup> B1+2c, C2b Papua New Guinea

Pipistrellus anchietai

VU <sup>42</sup> A2c Angola, Zaire, Zambia

Pipistrellus anthonyi CR 42 B1+2c

Myanmar
Pipistrellus arabicus

VU 42 D2 Oman

Pipistrellus cuprosus

VU 42 A2c Malaysia

Pipistrellus joffrei

CR <sup>42</sup> B1+2c Myanmar

Pipistrellus maderensis

VU 42 A2c, B1+2c

Portugal (Madeira), Spain (Canary 1s)

Pipistrellus mckenziei

VU 42 A2c Australia

Pipistrellus sturdeei

EN 42 B1+2c

Japan (Ogasawara-gunto)

Plecotus rafinesquii

VU 42 A2c USA

Plecotus taivanus

VU 42 A2c Taiwan

Plecotus teneriffae VU <sup>42</sup> A2c, D2 Spain (Canary ls) Plecotus townsendii

Townsend's Big-eared Bat VU 42 A2c

Canada, Mexico, USA

Scotophilus borbonicus

CR 42 Alc

Madagascar, Réunion

Tomopeas ravus

VU 42 A2c, D2

Peru

Vespertilio orientalis

VU 42 A2c, D2

China, Japan, Taiwan

Family MYSTACINIDAE

Mystacina tuberculata

New Zealand Lesser Short-tailed Bat

VU 42 A2c, C2a New Zealand

Family MOLOSSIDAE

Chaerephon gallagheri

CR 42 B1+2c

Zaire

Chaerephon pusilla

VU 42 D1+2 Seychelles

Chaerephon tomensis

VU <sup>42</sup> A2c, D2

São Tomé & Príncipe

Eumops maurus

VU 42 A2c, D2 Guyana, Suriname

Molossops aequatorianus

VU 42 A2c, D2 Ecuador

Molossops neglectus

EN 42 B1+2c

Brazil, Peru, Suriname, Venezuela

Mops niangarae

CR 42 B1+2c

Zaire

Mormopterus acetabulosus

VU 42 B1+2c

Ethiopia, Madagascar, Mauritius,

Réunion, South Africa

Mormopterus doriae

VU 42 A2c

Indonesia

Mormopterus jugularis

VU 42 A2c Madagascar

Mormopterus kalinowskii

VU <sup>42</sup> A2c, D2 Chile, Peru

Mormopterus minutus

VU <sup>42</sup> A2c Cuba Mormopterus phrudus

EN 42 B1+2c

Peru

Otomops formosus Javan Mastiff Bat

VU 42 A2c

Indonesia

Otomops johnstonei

VU 42 D2 Indonesia

Otomops martiensseni

**VU** 42 A2c

Angola, Djibouti, Ethiopia, Kenya, Madagascar, Rwanda, South Africa, Sudan, Tanzania, Uganda, Zaire,

Zambia, Zimbabwe

Otomops papuensis VU 42 D2

Papua New Guinea

Otomops secundus

VU 42 D2

Papua New Guinea

Otomops wroughtoni

Wroughton's Free-tailed Bat

CR <sup>42</sup> B1+2c

India

Tadarida lobata

VU 42 D2

Kenya, Zimbabwe

Order PRIMATES

Family CHEIROGALEIDAE

Allocebus trichotis

Hairy-eared Dwarf Lemur

CR 143 A1c, B1+2abc

Madagascar

Microcebus myoxinus

VU 143 B1+2abc

Madagascar

Mirza coquereli

Coquerel's Mouse-lemur VU 143 A2cd, B1+2abc

Madagascar

Family LEMURIDAE

Eulemur coronatus Crowned Lemur

VU 143 Alcd, B1+2bc

Madagascar

Eulemur macaco

Black Lemur

VU 15 Alcd Madagascar

Eulemur mongoz

Mongoose Lemur

VU 143 A1c, C2a

Comoros, Madagascar

Eulemur rubriventer

Red-bellied Lemur

VU 143 A2c Madagascar

Hapalemur aureus

Golden Bamboo Lemur

CR 15 A2cd Madagascar

Hapalemur simus

Broad-nosed Gentle Lemur

CR 143 A2cd Madagascar

Lemur catta

Ring-tailed Lemur

VU 143 A1c

Madagascar

Varecia variegata

Ruffed Lemur EN 15 Alcd

Madagascar

### Family MEGALADAPIDAE

Lepilemur dorsalis

Grey-backed Sportive Lemur VU 143 A2cd, B1+2c

Madagascar

Lepilemur septentrionalis

Northern Sportive Lemur

VU 143 A2cd Madagascar

### Family INDRIDAE

Avahi occidentalis

VU 143 A2cd Madagascar

Indri indri Indri

EN 143 A1c+2c

Madagascar

Propithecus diadema

Diademed Sifaka

EN 15 A1cd

Madagascar

Propithecus tattersalli

Golden-crowned Sifaka

CR 143 A2c, B1+2bcd

Madagascar

Propithecus verreauxi

Verreaux's Sifaka

VU 15 A2cd

Madagascar

#### Family DAUBENTONIIDAE

Daubentonia madagascariensis

Aye-aye

EN 143 A2cd, C2a

Madagascar

### Family LORIDAE

Loris tardigradus

Slender Loris

VU 143 A1cd

India, Sri Lanka

Nycticebus pygmaeus

Pygmy Loris

VU 143 Alcd

Cambodia?, China, Laos, Viet Nam

### Family CALLITRICHIDAE

Callimico goeldii

Goeldi's Marmoset

VU 143 A1c

Bolivia, Brazil, Colombia, Peru

Callithrix aurita

Buffy-tufted-ear Marmoset

EN 143 B1+2abcde, C2a

Brazil

Callithrix chrysoleuca

Golden-white Tassel-ear Marmoset

VU 143 B1+2c

Brazil

Callithrix flaviceps

Buffy-headed Marmoset

EN 143 B1+2abcde, C2a

Brazil

Callithrix geoffroyi

Geoffroy's Tufted-ear Marmoset

VU 143 B1+2b, C2a Brazil.

Callithrix leucippe

VU 143 B1+2c

Brazil

Callithrix nigriceps

Black-headed Marmoset

VU 143 B1+2c

Brazil

Leontopithecus caissara

Black-faced Lion Tamarin CR 143 B1+2abcde, C2a, D1

Brazil

Leontopithecus chrysomelas

Golden-headed Lion Tamarin

EN 143 B1+2abcde, C2a

Brazil

Leontopithecus chrysopygus

Golden-rumped Lion Tamarin

CR 143 B1+2abcde, C2a

Brazil

Leontopithecus rosalia

Golden Lion Tamarin CR 143 B1+2abcde, C2a

Brazil

Saguinus leucopus

White-footed Tamarin

VU 143 A1c, B1+2c, C2a Colombia

Saguinus oedipus

Cotton-top Tamarin

EN 143 B1+2abcde, C2a

Colombia

### Family CEBIDAE

Alouatta fusca

Brown Howler

VU 143 A1c Argentina, Brazil

Aotus brumbacki

Brumback's Night Monkey

VU 143 B1+2c

Colombia

Aotus lemurinus

VU 143 B1+2c

Colombia, Costa Rica, Panama

Aotus miconax

Andean Night Monkey

VU 143 Alc, B1+2c

Peru

Ateles belzebuth

Long-haired Spider Monkey

VU 143 A1c

Brazil, Colombia, Ecuador, Peru,

Venezuela

Ateles fusciceps

Brown-headed Spider Monkey

VU 143 A1c, B1+2abcde Colombia, Ecuador, Panama

Ateles marginatus

EN 143 B1+2abcde

Brazil

Brachyteles arachnoides

Muriqui

EN 143 B1+2abcde, C2a

Brazil

Brachyteles hypoxanthus

EN 143 B1+2abcde, C2a Brazil

Cacajao calvus

Bald Uakari

VU 143 A1c

Brazil, Colombia, Peru

Callicebus dubius VU 143 B1+2c

Brazil

Callicebus oenanthe

Andean Titi Monkey VU 143 B1+2c

Peru

Callicebus personatus

Masked Titi

VU 143 A1c

Brazil

Cebus kaapori

Ka'apor Capuchin Monkey VU 143 A1c, B1+2c

Brazil

Cebus xanthosternos

CR 143 B1+2abcde, C2a Brazil

Lagothrix flavicauda

Yellow-tailed Woolly Monkey CR 143 B1+2abcde, C2a

Peru

Saimiri oerstedii

Central American Squirrel Monkey EN 143 B1+2abcde, C2a

Costa Rica, Panama

Saimiri vanzolinii

Blackish Squirrel Monkey VU 143 BI+2c, C2a

Brazil

Family CERCOPITHECIDAE

Cercopithecus diana

Diana Monkey

VU 143 A1c+2c

Côte d'Ivoire, Ghana, Guinea,

Liberia, Sierra Leone

Cercopithecus erythrogaster

White-throated Monkey

VU 143 A1c Benin, Nigeria

Cercopithecus erythrotis

Red-eared Guenon

VU 143 A1c

Cameroon, Equatorial Guinea, Nigeria

Cercopithecus preussi Preuss's Monkey

EN 143 Alcd+2c

Cameroon, Equatorial Guinea, Nigeria

Cercopithecus sclateri

Sclater's Guenon

EN 143 B1+2c

Nigeria

Cercopithecus solatus

Sun-tailed Monkey

VU 143 B1+2a, C1

Gabon

Colobus satanas

Black Colobus

VU 143 Alc

Cameroon, Congo, Equatorial Guinea, Gabon

Colobus vellerosus

White-thighed Black-and-white

Colobus

VU 143 Alc+2c

Benin, Côte d'Ivoire, Ghana, Nigeria, Togo

VU 143 Alcd

Macaca arctoides

Stumptail Macaque

Bangladesh, Cambodia, China, India, Laos, Malaysia, Myanmar, Thailand, Viet Nam

Macaca assamensis

Assamese Macaque

VU 143 Alcd

Bhutan, China, India, Laos, Myanmar, Nepal, Thailand, Viet Nam

Macaca brunnescens

Muna-buton Macaque

VU 143 CI Indonesia

Macaca cyclopis

Taiwan Macaque VU 143 A1cd

Japan [int], Taiwan

Macaca fuscata

Japanese Macaque

EN 143 A2cd Japan

Macaca maura

Moor Macaque

EN 143 Alcd

Indonesia

Macaca nemestrina

Pig-tailed Macaque

VU 143 Alcd

Brunei?, China, Indonesia, Laos, Malaysia, Myanmar, Singapore [int], Thailand, Viet Nam

Macaca nigra

Celebes Black Macaque

EN 143 Alacd

Indonesia

Macaca pagensis

Mentawai Macaque CR 143 A1cd+2c

Indonesia

Macaca silenus

Lion-tailed Macaque

EN 143 C2a

India

Macaca sylvanus

Barbary Macaque

VU 143 A1c, C1

Algeria, Gibraltar [int], Morocco

Mandrillus leucophaeus

Drill

EN 143 Alacd+2cd, C1+2a Cameroon, Equatorial Guinea,

Nigeria

Nasalis larvatus

Proboscis Monkey VU 143 A2c

Brunei, Indonesia, Malaysia

Presbytis comata

Grizzled Leaf Monkey

EN 143 A1c, C2a

Indonesia

Presbytis potenziani

Mentawai Leaf Monkey

VU 143 AIc+2c

Indonesia

Pygathrix nemaeus

Douc Monkey

EN 143 Alcd

Cambodia, China, Laos, Viet Nam

Rhinopithecus avunculus

Tonkin Snub-nosed Monkey

CR 143 C1, E

Viet Nam

Rhinopithecus bieti

Yunnan Snub-nosed Monkey

EN 143 C2a

China

Rhinopithecus brelichi

Guizhou Snub-nosed Monkey

EN 143 C2b

China

Rhinopithecus roxellana

Golden Snub-nosed Monkey

VU 143 C2a

China, India?

Simias concolor Pig-tailed Snub-nosed Monkey

EN 143 A1cd+2c

Indonesia

Trachypithecus auratus

VU 143 Alc

Indonesia

Trachypithecus delacouri

White-rumped Black Lemur

CR 143 A1d, C2a

Viet Nam

Trachypithecus francoisi

François' Leaf Monkey

VU 143 AIcd+2cd, C2a China, Laos, Viet Nam

Trachypithecus johnii

Nilgiri Leaf Monkey

VU 143 A1d

India

Trachypithecus pileatus

VU 143 A2c

Bangladesh, China?, India, Myanmar

Trachypithecus poliocephalus

EN 143 A2c, C2a

Viet Nam

Trachypithecus vetulus

VU 143 A1c

Sri Lanka

#### Family HYLOBATIDAE

Hylobates concolor Black Gibbon

EN 143 Alcd, C2a Cambodia, China, Viet Nam

Hylobates klossii Mentawai Gibbon

VU 143 A1c+2c Indonesia

Hylobates moloch Silvery Gibbon

CR 143 Alc, C2a Indonesia

Hylobates pileatus

Pileated Gibbon

VU 143 Alcd+2cd

Cambodia, Laos, Thailand

#### Family HOMINIDAE

## Gorilla gorilla

Gorilla

EN 143 A2cd

Angola, Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon, Nigeria, Rwanda, Uganda, Zaire

Pan paniscus

Pygmy Chimpanzee EN 143 A2cd

Pan troglodytes

Chimpanzee

EN 143 A2cd

Burundi, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia [re-int], Ghana, Guinea, Guinea-Bissau (ex?), Liberia, Mali, Nigeria, Rwanda, Senegal, Sierra Leone, Sudan, Tanzania, Uganda, Zaire

Pongo pygmaeus

Orang-utan

VU 143 Alcd, Cl

Brunei, Indonesia, Malaysia

#### Order CARNIVORA

#### Family CANIDAE

Canis rufus

Red Wolf CR 184 D1

USA

Canis simensis Ethiopian Wolf

> CR 36 A1b+2be, C1, E Ethiopia

### Cuon alpinus

Dhole

VU 36 C2a

Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan?, Kyrgyzstan?, Laos, Malaysia, Mongolia, Myanmar, Nepal, North Korea?, Russia, South Korea?, Tajikistan?, Thailand, Uzbekistan?, Viet Nam

Lycaon pictus

African Wild Dog

EN 36 C1

Algeria (ex?), Angola, Benin (ex?), Botswana, Burkina Faso (ex?), Burundi (ex?), Cameroon, Central African Republic, Chad, Congo (ex?), Côte d'Ivoire (ex?), Eritrea (ex?), Ethiopia, Gabon (ex?), Gambia (ex?), Ghana (ex?), Guinea (ex?), Kenya, Malawi, Mali (ex?), Mozambique, Namibia, Niger (ex?), Nigeria (ex?), Rwanda (ex), Senegal, Sierra Leone (ex?), Somalia, South Africa, Sudan, Swaziland (ex?), Tanzania, Togo (ex?), Uganda (ex?), Zaire (ex?), Zambia, Zimbabwe

#### Speothos venaticus

**Bush Dog** 

VU 36 C2a

Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Suriname, Venezuela

#### Family FELIDAE

## Acinonyx jubatus

Cheetah

VU 40 Ald+2d, Cl

Afghanistan (ex), Algeria, Angola, Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Egypt (ex?), Ethiopia, India (ex), Iran, Jordan (ex), Kenya, Libya, Malawi, Mali, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Pakistan (ex), Saudi Arabia (ex), Senegal (ex?), Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Western Sahara (ex?), Zaire, Zambia, Zimbabwe

#### Catopuma badia

Bay Cat

VU 40 Indonesia, Malaysia

Lynx pardinus

Iberian Lynx

EN 40 CI Portugal, Spain Neofelis nebulosa

Clouded Leopard VU 40 Alcd

Bangladesh (ex?), Bhutan, Brunei, Cambodia?, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Taiwan (ex?), Thailand, Viet Nam

### Oncifelis guigna

Kodkod

VU 40 C2a Argentina, Chile

### Oreailurus jacobita

Andean Cat

VU 40 C2a

Argentina, Bolivia, Chile, Peru

#### Panthera leo

Lion

VU 40 Alcd

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Malawi, Mali, Mauritania (ex?), Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

### Panthera tigris

Tiger

EN 40 A2cd

Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, North Korea (ex?), Russia, Thailand, Viet Nam

## Prionailurus planiceps

Flat-headed Cat

VU 40 A2c

Brunei, Indonesia, Malaysia, Myanmar?, Thailand

Uncia uncia

Snow Leopard

EN 40 C2a

Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan, Uzbekistan

### Family HERPESTIDAE

Bdeogale jacksoni

Jackson's Mongoose

VU 117 B1+2c

Kenya, Uganda

Galidictis fasciata Broad-striped Mongoose

VU 117 Alcd+2cd Madagascar



Galidictis grandidieri Giant-striped Mongoose EN 117 B1+3b

Madagascar

Liberiictis kuhni Liberian Mongoose EN 117 B1+2c Côte d'Ivoire, Guinea, Liberia

Mungotictis decemlineata Narrow-striped Mongoose

VU 117 B1+2c Madagascar

Salanoia concolor Brown-tailed Mongoose VU 117 B1+2c Madagascar

### Family MUSTELIDAE

Gulo gulo Wolverine VU 117 A2c

Canada, Estonia, Finland, Mongolia, Norway, Russia, Sweden, USA

Lutra felina Marine Otter EN 127 Alcd Argentina, Chile, Peru

Lutra perspicillata Smooth-coated Otter

VU 127 A2cd Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Iraq, Laos, Malaysia, Myanmar, Nepal, Pakistan, Thailand, Viet Nam

Lutra provocax Southern River Otter VU 127 A2cd Argentina, Chile

Lutra sumatrana Hairy-nosed Otter VU 127 A2cd

Brunei, Cambodia, Indonesia, Laos?, Malaysia, Singapore, Thailand, Viet Nam

Martes gwatkinsii Nilgiri Marten VU 117 B1+2c India

Melogale everetti Kinabalu Ferret-badger VU 117 B1+2c Malaysia

Mustela felipei Colombian Weasel EN 117 BI+2ce Colombia, Ecuador Mustela lutreola

European Mink EN 117 Alace Belarus, Estonia, Finland (ex?). France, Georgia, Latvia, Lithuania (ex), Poland (ex?), Romania, Russia, Spain

Mustela lutreolina

Indonesian Mountain Weasel EN 117 B1+2c

Indonesia

Mustela strigidorsa Back-striped Weasel VU 117 C2a Bhutan, China, India, Laos, Myanmar, Thailand, Viet Nam

Mydaus marchei Palawan Stink Badger VU 117 B1+2c Philippines

Pteronura brasiliensis Giant Otter

VU 127 A2cd Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay (ex?), Venezuela

### Family OTARIIDAE

Arctocephalus galapagoensis Galápagos Fur Seal VU 153 A2d Ecuador (Galápagos Is) [Pacific (southeast)]

Arctocephalus philippii Juan Fernandez Fur Seal VU 153 D2 Chile (Juan Femandez Is)

[Pacific (southeast)] Arctocephalus townsendi Guadalupe Fur Seal

VU 153 D2 Mexico, USA [Pacific (eastern central)]

Callorhinus ursinus Northern Fur Seal VU 153 A1b

Canada, Japan, Russia, USA [Pacific (eastern central, northeast, northwest)]

Eumetopias jubatus Steller's Sea Lion EN 153 A1b Canada, Japan?, Russia, USA [Pacific (eastern central, northeast, northwest)]

Phocarctos hookeri

Hooker's Sea Lion VU 153 D2 New Zealand (Auckland Is) [Pacific (southwest)]

### Family PHOCIDAE

Monachus monachus Mediterranean Monk Seal CR 153 C2a

Albania, Algeria, Bulgaria, Cyprus (ex?), Greece, Italy, Lebanon (ex?), Libya, Mauritania, Morocco, Portugal (Desertas Is, Madeira), Spain (Canary 1s (ex?), Chafarinas Is), Syria (ex?), Tunisia, Turkey, Western Sahara, Yugoslavia [Atlantic (eastern central), Mediterranean and Black Sea]

Monachus schauinslandi Hawaiian Monk Seal EN 153 C2a USA (Hawaiian Is) [Pacific (eastern central, northwest)]

Phoca caspica Caspian Seal VU 153 B1+2e Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan

### Family PROCYONIDAE

Bassaricyon lasius EN 117 D1 Costa Rica

Bassaricyon pauli EN 117 D1 Panama

Nasua nelsoni Cozumel Island Coati EN 117 D1 Mexico

Procyon insularis EN 117 D1 Mexico

Procyon maynardi EN 117 C2a Bahamas

Procyon minor EN 117 C2b Guadeloupe

Mexico

Procyon pygmaeus Cozumel Island Raccoon EN 117 C2a

Family URSIDAE

Ailuropoda melanoleuca Giant Panda EN 17 B1+2c, C2a China

Ailurus fulgens

Lesser Panda

EN 117 C2a

Bhutan, China, India, Laos, Myanmar, Nepal

Melursus ursinus

Sloth Bear

VU 17 A2cd, C1+2a

Bangladesh, Bhutan?, India, Nepal, Sri Lanka

Tremarctos ornatus

Spectacled Bear

VU 17 A2bc

Bolivia, Colombia, Ecuador, Panama?, Peru, Venezuela

Ursus thibetanus

Asiatic Black Bear

VU 17 A1cd

Afghanistan, Bangladesh, Bhutan, Cambodia, China, India, Iran, Japan, Laos, Malaysia?, Mongolia, Myanmar, Nepal, North Korea, Pakistan, Russia, South Korea, Taiwan, Thailand, Viet Nam

### Family VIVERRIDAE

Chrotogale owstoni

Owston's Palm Civet

VU 117 A1cd

China, Laos, Viet Nam

Cryptoprocta ferox

Fossa

VU 117 B1+2e

Madagascar

Cynogale beunettii Otter-civet

EN 117 A1ce, C2a

Brunei, Indonesia, Malaysia, Singapore?, Thailand, Viet Nam

Diplogale hosei

Hose's Palm Civet

VU 117 B1+2c

Malaysia

Eupleres goudotii

Falanouc

EN 117 B1+2c Madagascar

Fossa fossa

Malagasy Civet

VU 117 B1+2c

Madagascar

Genetta cristata

Crested Genet

EN 117 BI+2c

Cameroon, Nigeria

Macrogalidia musschenbroekii

Sulawesi Palm Civet

VU 117 A2c

Indonesia

Paradoxurus jerdoni

Jerdon's Palm Civet VU 117 B1+2c

India

Viverra civettina

CR 117 C2a

India

### Order CETACEA

### Family BALAENIDAE

Eubalaena glacialis

Northern Right Whale

EN 41 C1, D1

[Arctic Sea, Atlantic (northeast, northwest, western central), Pacific (eastern central, northeast, northwest)]

#### Family BALAENOPTERIDAE

Balaenoptera borealis

Sei Whale

EN 41 Alabd

[Atlantic (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea, Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central)]

#### Balaenoptera musculus Blue Whale

EN 41 Alabd

[Arctic Sea, Atlantic (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea (western central), Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest)]

#### Balaenoptera physalus Fin Whale

EN 41 Alabd

[Arctic Sea, Atlantic (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea, Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central)]

#### Megaptera novaeangliae Humpback Whale

VU 41 Alad

[Arctic Sea, Atlantic (Antarctic. eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea, Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central)]

### Family DELPHINIDAE

Cephalorhynchus hectori

Hector's Dolphin

VU 41 Alad

New Zealand

[Pacific (southwest)]

### Family MONODONTIDAE

Delphinapterus leucas White Whale

VU 41 Alabd

Canada, Greenland, Norway, Russia,

[Arctic Sea, Atlantic (northeast, northwest), Pacific (northeast, northwest)]

### Family PHOCOENIDAE

Phocoena phocoena

Harbour Porpoise VU 41 Alcd

Belgium, Bulgaria, Canada, Cape Verde, China?, Denmark, Faeroe Islands, Finland, France, Georgia, Germany, Greenland, Iceland, Ireland, Japan, Mauritania, Mexico, Morocco, Netherlands, North Korea, Norway, Poland, Portugal, Romania, Russia, Senegal, South Korea, Spain, Sweden, Tunisia, Turkey, USA, Ukraine, United Kingdom [Arctic Sea, Atlantic (eastern central, northeast, northwest), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest)]

#### Phocoena sinus

Vaquita

CR 41 C2b

Mexico

[Pacific (eastern central)]

#### Family PHYSETERIDAE

Physeter catodon Sperm Whale

VU 41 Albd

[Atlantic (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea,



Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central)]

### Family PLATANISTIDAE

#### Inia geoffrensis Boto

VU 41 Alcd

Bolivia, Brazil, Colombia, Ecuador, Guyana?, Peru, Venezuela [R. Amazon, R. Orinoco]

## Lipotes vexillifer

Baiji

CR 41 A1bc, C2b, D1 China [R. Yangtze]

#### Platanista gangetica Ganges River Dolphin

EN 41 Alacd Bangladesh, Bhutan, India, Nepal [R. Brahmaputra, R. Ganges]

## Platanista minor

Indus River Dolphin

EN 41 Alacd, B1+2abcde Pakistan [R. Indus]

#### Order SIRENIA

#### Family DUGONGIDAE

## Dugong dugon

Dugong

VU 157 Alcd Australia, Bahrain, Bangladesh, Cambodia, China, Comoros?, Djibouti, Egypt, Eritrea, Federated States of Micronesia, Guam, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kenya, Kuwait, Madagascar, Malaysia, Mauritius, Mozambique, Myanmar, New Caledonia, Palau, Papua New Guinea, Philippines, Saudi Arabia, Singapore, Solomon Islands, Somalia, Sri Lanka, Sudan, Taiwan, Tanzania, Thailand, United Arab Emirates, Vanuatu, Viet Nam, Yemen [Indian Ocean (eastern, western), Pacific (northwest, western central)]

#### Family TRICHECHIDAE

#### Trichechus inunguis

Amazonian Manatee

VU 157 Alcd Brazil, Colombia, Ecuador, Peru, Venezuela [R. Amazon]

#### Trichechus manatus Caribbean Manatee

VU 157 A2d Bahamas, Belize, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, Suriname, Trinidad and Tobago, USA, Venezuela [Atlantic (northwest, southwest, western central)]

## Trichechus senegalensis

African Manatee

VU 157 Alcd Angola, Benin (ex?), Cameroon, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea?, Guinea-Bissau?, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, Zaire [Atlantic (eastern central, southeast)]

#### Order PROBOSCIDEA

#### Family ELEPHANTIDAE

#### Elephas maximus

Asian Elephant

EN 10 Alcd Bangladesh, Bhutan, Brunei, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand, Viet Nam

#### Loxodonta africana African Elephant

EN 2 Alb Angola, Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guinea, Kenya, Liberia, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

#### Order PERISSODACTYLA

#### Family EQUIDAE

### Equus africanus

African Wild Ass CR 64 Alb

Ethiopia, Somalia

Equus grevyi Grevy's Zebra EN 64 Ala+2c

Ethiopia, Kenya

#### Equus hemionus

VU 64 A2c

China, India, Iran, Israel [re-int], Kazakhstan, Mongolia, Turkmenistan, Uzbekistan [re-int]

### Equus zebra

Mountain Zebra

EN 64 Alb

Angola, Namibia, South Africa

### Family TAPIRIDAE

#### Tapirus bairdii

Central American Tapir

VU 171 Alabcd+2bce, C2a Belize, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama

### Tapirus indicus

Malayan Tapir

VU 171 Alc+2c, B2cd+3a, CI+2b Indonesia, Laos, Malaysia, Myanmar, Thailand, Viet Nam

### Tapirus pinchaque

Mountain Tapir

EN 171 A1c+2cd, C1, E Colombia, Ecuador, Peru, Venezuela

### Family RHINOCEROTIDAE

#### Dicerorhinus sumatrensis

Sumatran Rhinoceros

CR 11 Albcd, C2a Cambodia (ex?), India (ex?), Indonesia, Laos (ex?), Malaysia, Myanmar, Thailand, Viet Nam

### Diceros bicornis

Black Rhinoceros

CR 3 Alabc Angola, Botswana, Cameroon, Ethiopia (ex?), Kenya, Malawi (ex?), Mozambique, Namibia, Rwanda (ex?), South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

#### Rhinoceros sondaicus

Javan Rhinoceros

CR 11 C2a

Cambodia, Indonesia, Laos, Myanmar (ex?), Thailand (ex?), Viet Nam

### Rhinoceros unicornis

Great Indian Rhinoceros EN 11 B1+2cde

Bhutan, India, Nepal

#### Order HYRACOIDEA

### Family PROCAVIIDAE

Dendrohyrax validus

Eastern Tree Hyrax VU 93 B1+2c Kenya, Tanzania

Heterohyrax antineae

VU 93 D2 Algeria

Heterohyrax chapini

VU 93 D2 Zaire

#### Order ARTIODACTYLA

### Family SUIDAE

Babyrousa babyrussa

Babirusa VU 135 Alcd

Indonesia

Sus cebifrons

Visayan Warty Pig CR <sup>135</sup> A1cde, B1+2acd, E

Philippines

Sus salvanius

Pygmy Hog

CR 135 Alc, B1+2cd, E

Bhutan (ex?), India, Nepal (ex?)

Sus verrucosus

Javan Warty Pig

EN 135 A2cd, B1+2ade, E

Indonesia

#### Family TAYASSUIDAE

Catagonus wagneri

Chacoan Peccary

EN 135 Alacde, B1+2bde, E Argentina, Bolivia, Paraguay

#### Family HIPPOPOTAMIDAE

Hexaprotodon liberiensis

Pygmy Hippopotamus

VU 89 C2a, E

Côte d'Ivoire, Guinea, Guinea-Bissau?, Liberia, Nigeria,

Sierra Leone

### Family CAMELIDAE

Camelus bactrianus

Wild Bactrian Camel

EN 84 A1cd, C2a China, Mongolia

#### Family MOSCHIDAE

Moschus moschiferus

Siberian Musk Deer

VU 59 Alacd

China, Mongolia, North Korea,

Russia, South Korea

#### Family CERVIDAE

Axis calamianensis

Calamian Deer

EN 59 B1+3d

Philippines

Axis kuhli

Kuhl's Deer

EN 59 D1

Indonesia

#### Blastocerus dichotomus

Marsh Deer

VU 59 A2cde

Argentina, Bolivia, Brazil, Paraguay,

Peru, Uruguay

### Cervus albirostris

Thorold's Deer

VU 59 C1

China

#### Cervus alfredi

Phillipine Spotted Deer

EN 59 B1+2c

Philippines

#### Cervus duvauceli

Swamp Deer

VU 59 C1 India, Nepal

## Cervus eldi

Eld's Deer

VU 59 A2c

Cambodia, China, India, Laos, Myanmar, Thailand, Viet Nam

### Elaphurus davidianus

Pere David's Deer

CR 59 D1

China [re-int]

#### Hippocamelus bisulcus

South Andean Deer

EN 59 C2a

Argentina, Chile

### Muntiacus crinifrons

Black Muntjac

VU 59 CI

China

#### Pudu puda

Southern Pudu

VU 59 Alcde

Argentina, Chile

#### Family BOVIDAE

### Addax nasomaculatus

Addax

EN 9 A1c, C2a

Algeria (ex), Chad, Egypt (ex), Libya (ex), Mali, Mauritania, Niger, Sudan (ex?), Tunisia [re-int]

Ammodorcas clarkei

Dibatag

VII 9 CI

Ethiopia, Somalia

## Ammotragus lervia

Barbary Sheep

VU 37 A2cd

Algeria, Chad?, Egypt (ex?), Libya?, Mali?, Mauritania (ex?), Mexico

[int], Morocco, Niger, Spain [int] (Canary Is), Sudan, Tunisia (ex?), USA [int], Western Sahara?

### Antilope cervicapra

Blackbuck

VU 9 Alc

Argentina [int], Bangladesh (ex), India, Nepal, Pakistan, USA [int]

#### Bison bonasus

European Bison

EN 22 A2ce, C2a

Belarus [re-int], Kyrgyzstan [re-int], Lithuania [re-int], Poland [re-int], Russia [re-int], Ukraine [re-int]

### Bos frontalis

Gaur

VU 12 Alcd+2cd, C1+2a Bangladesh (ex?), Bhutan,

Cambodia, China, India, Laos, Malaysia, Myanmar, Nepal,

Thailand, Viet Nam

Bos grunniens

Wild Yak VU 12 A1d+2d, C1

China, India, Nepal?

#### Bos javanicus

Banteng

EN 12 A1cd+2cd, C1+2a Bangladesh (ex?), Brunei (ex?), Cambodia, India (ex?), Indonesia,

Laos, Malaysia, Myanmar, Thailand, Viet Nam

Bos sauveli

Kouprey

CR 12 A2d, C1+2a, D1

Cambodia, Laos, Thailand, Viet Nam

#### Bubalus bubalis

Wild Water Buffalo

EN 12 A2e, C1

Bhutan, India, Nepal, Thailand

### Bubalus depressicornis

Lowland Anoa

EN 12 C1+2a

Indonesia

### Bubalus mindorensis

Tamaraw

EN 12 B1+2c, D1 Philippines

#### Bubalus quarlesi

Mountain Anoa

EN 12 C1+2a **Indonesia** 



Budorcas taxicolor

Takin

VU 37 A2cd

Bhutan, China, India, Myanmar

Capra aegagrus Wild Goat

VIJ 37 A2cde

Afghanistan, Armenia?, Azerbaijan, Georgia, Greece, Iran, Oman, Pakistan, Russia?, Turkey,

Turkmenistan

Capra caucasica West Caucasian Tur

EN 37 A1d+2cde

Georgia, Russia

Capra cylindricornis

East Caucasian Tur

VU 37 A1d+2de, CI

Azerbaijan?, Georgia, Russia

Capra falconeri Markhor

EN 37 A2cde

Afghanistan, India, Pakistan, Tajikistan, Turkmenistan, Uzbekistan

Capra nubiana

Nubian Ibex

EN 37 C2a

Egypt, Ethiopia, Israel, Jordan, Lebanon (ex), Oman, Saudi Arabia, Sudan, Syria (ex), Yemen

Capra walia

Walia Ibex

CR 37 C2b

Ethiopia

Capricornis sumatraensis

Mainland Serow

VU 37 A2cd

Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, Viet Nam

Capricornis swinhoei

Formosan Serow

VU 37 A2cd

Taiwan

Cephalophus adersi

Aders' Duiker

EN 9 CI

Kenya, Tanzania

Cephalophus jentinki

Jentink's Duiker

VU 9 Alc, CI

Côte d'Ivoire, Liberia, Sierra Leone

Cephalophus spadix

Abbott's Duiker

VU 9 C1

Tanzania

Cephalophus zebra

Zebra Duiker

VU 9 Alc, C1

Côte d'Ivoire, Liberia, Sierra Leone

Damaliscus hunteri

Hunter's Antelope

CR 9 Ala

Kenya, Somalia

Dorcatragus megalotis

Beira Antelope

VU 9 C1

Djibouti (ex?), Ethiopia, Somalia

Gazella bilkis

Oueen of Sheba's Gazelle

CR 9 B1+2e, C2a

Saudi Arabia?, Yemen

Gazella cuvieri

Cuvier's Gazelle

EN 9 C2a

Algeria, Morocco, Tunisia, Western Sahara (ex)

Gazella dama

Dama Gazelle

EN 9 Alc, Cl

Algeria (ex), Chad, Libya (ex), Mali, Mauritania (ex), Morocco (ex), Niger, Senegal [re-int], Sudan,

Western Sahara (ex)

Gazella leptoceros

Slender-horned Gazelle EN 9 C1+2a

Algeria, Chad, Egypt, Libya, Mali, Mauritania?, Morocco, Niger, Sudan, Tunisia, Western Sahara (ex)

Gazella rufifrons

Red-fronted Gazelle

VU 9 Alc

Benin?, Burkina Faso, Cameroon, Central African Republic, Chad, Eritrea, Ethiopia, Gambia (ex?), Ghana (ex?), Mali, Mauritania, Niger, Nigeria, Senegal, Sudan, Togo

Gazella soemmerringii

Soemmerring's Gazelle

VU 9 Cl

Djibouti, Eritrea, Ethiopia, Kenya?, Somalia, Sudan

Gazella spekei

Speke's Gazelle

VU 9 Cl

Ethiopia, Somalia

Hemitragus hylocrius

Nilgiri Tahr

EN 37 C2a

India

Hemitragus jayakari

Arabian Tahr

EN 37 C2a

Oman, United Arab Emirates

Hemitragus jemlahicus

Himalayan Tahr

VU 37 A2cde

China, India, Nepal

Madoqua piacentinii

Silver Dikdik

VU ° C1

Somalia

Naemorhedus baileyi

Red Goral

VU 37 A2cd

China, India, Myanmar

Naemorhedus caudatus

Long-tailed Goral

VU 37 A2cd

China, Laos, North Korea, Russia. South Korea, Thailand

Oryx dammah

Scimitar-horned Oryx

CR 9 Alc, C1+2a

Algeria (ex), Burkina Faso (ex?), Chad (ex?), Egypt (ex), Israel [int], Libya (ex), Mali (ex?), Mauritania (ex), Morocco (ex), Niger (ex?), Senegal (ex), Sudan (ex?), Tunisia

[re-int], Western Sahara (ex)

Oryx leucoryx

Arabian Oryx

EN 9 DI

Egypt (ex), Iraq (ex), Israel (ex), Jordan [re-int], Oman [re-int], Saudi Arabia [re-int], Syria (ex), United Arab Emirates (ex), Yemen (ex)

Ovis ammon

Argali

VU 37 A2cde

Afghanistan, Bhutan?, China, India, Kazakhstan, Kyrgyzstan?, Mongolia, Nepal, Pakistan?, Russia, Tajikistan

Ovis orientalis

Mouflon, Urial

VU 37 A2cde

Afghanistan, Armenia, Azerbaijan, Cyprus, France, India, Iran, Italy, Pakistan, Tajikistan, Turkey,

Turkmenistan

Pantholops hodgsonii

Tibetan Antelope

VU 9 Alc

China, India, Nepal?

Procapra przewalskii Przewalski's Gazelle

CR 9 Alc, Cl

China

Pseudois schaeferi Dwarf Blue Sheep

EN 37 A2d, B1+2e

China

Pseudonovibos spiralis

Linh-duong

EN 9 C2a

Cambodia, Viet Nam

Pseudoryx nghetinhensis

Vu Quang Ox

EN 9 C1+2a

Laos, Viet Nam

Saiga tatarica

Saiga

VU 9 A1a

China (ex), Kazakhstan, Mongolia,

Russia, Turkmenistan

Tetracerus quadricornis Four-horned Antelope

VU 9 C2a

India, Nepal

Tragelaphus buxtoni

Mountain Nyala

EN 9 Ala, Cl

Ethiopia

#### Order RODENTIA

#### Family SCIURIDAE

Ammospermophilus nelsoni

Nelson's Antelope Squirrel EN 82 A1a, B1+2c

USA

Biswamayopterus biswasi

CR 15 B1+2c, C1

India

Callosciurus pygerythrus

VU 15 Alcd

Bangladesh, China, India, Laos, Myanmar, Nepal, Thailand, Viet Nam

Callosciurus quinquestriatus

VU 15 A1cd

China, Myanmar

Cynomys mexicanus

Mexican Prairie Dog

EN 15 Alcd

Mexico

Eupetaurus cinereus

Woolly Flying Squirrel

EN 8 A2ce, B1+2cd, C2a

India, Pakistan

Funisciurus carruthersi

Carruther's Mountain Squirrel

VU 15 B1+2c

Burundi, Rwanda, Uganda

Hylopetes alboniger

EN 15 Alc

Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal,

Thailand, Viet Nam

Hylopetes sipora

EN 15 B1+2c

Indonesia

Hylopetes winstoni

CR 15 B1+2c, C1

Indonesia

Hyosciurus heinrichi

VU 15 B1+2c

Indonesia

Hyosciurus ileile

VU 15 B1+2c

Indonesia (Sulawesi)

Iomys sipora

VU 15 B1+2c

Indonesia

Lariscus hosei

VU 15 B1+2c

Malaysia

Marmota menzbieri

Menzbier's Marmot

VU 15 B1+2c

Kazakhstan, Kyrgyzstan

Marmota vancouverensis

Vancouver Island Marmot

EN 82 C2b, D1

Canada

Myosciurus pumilio

African Pygmy Squirrel

VU 15 A2c

Cameroon, Equatorial Guinea,

Gabon, Nigeria

Paraxerus cooperi

VU 15 B1+2c Cameroon

Paraxerus palliatus

VU 15 Alc

Kenya, Malawi, Mozambique, Somalia, South Africa, Tanzania,

Zimbabwe

Paraxerus vexillarius

VU 15 B1+2c

Tanzania

Paraxerus vincenti

VU 15 B1+2c

Mozambique

Prosciurillus abstrusus

VU 15 B1+2c

**Indonesia** 

Ratufa indica

VU 15 B1+2c

India

Ratufa macroura VU 15 Alc

India, Sri Lanka

Sciurotamias forresti VU 15 A1c

China

22

Spermophilus brunneus

Idaho Ground Squirrel

EN 82 B2d+3d

USA

Spermophilus citellus

European Squirrel

VU 8 Alc

Austria, Bosnia and Herzegovina,

Bulgaria, Croatia, Czech Republic,

Germany, Greece, Macedonia,

Moldova, Poland, Romania,

Slovakia, Slovenia, Turkey, Ukraine,

Yugoslavia

Spermophilus mohavensis Mohave Ground Squirrel

VU 82 B1+3d

USA

Spermophilus suslicus

Spotted Souslik

VU 8 A1c

Poland, Romania, Russia, Ukraine

Spermophilus washingtoni

Washington Ground Squirrel VU 82 A1a, B1+2d, C2a

USA

Sundasciurus jentinki

VU 15 B1+2c

Indonesia, Malaysia Sundasciurus iuvencus

EN 86 B1+2b

Philippines

Sundasciurus rabori

VU 86 A1c, B1+2b

Philippines

Sundasciurus samarensis

VU 15 B1+2c

Philippines Tamias palmeri

Palmer's Chipmunk

VU 82 A2c

USA

Trogopterus xanthipes

EN 15 Alcd

China

Family GEOMYIDAE

Geomys tropicalis

VU 15 B1+2c

Mexico

Orthogeomys cuniculus

CR 15 B1+2c Mexico

Orthogeomys heterodus

VU 15 B1+2ac

Costa Rica

Pappogeomys alcorni

VU 15 B1+2ac

Mexico



Pappogeomys neglectus CR <sup>15</sup> B1+2c, C1 Mexico

Zygogeomys trichopus Michoacan Pocket Gopher EN <sup>15</sup> Alc, B1+2ac Mexico

### Family HETEROMYIDAE

Dipodomys elator Texas Kangaroo Rat VU 82 B1+2c USA

Dipodomys gravipes
San Quintin Kangaroo Rat
EN 15 B1+2c
Mexico

Dipodomys ingens Giant Kangaroo Rat CR 82 A1a USA

Dipodomys insularis CR 15 B1+2c, C1 Mexico

Dipodomys margaritae CR 15 B1+2c, C1 Mexico

Heteromys nelsoni CR 15 B1+2c Mexico

Perognathus longimembris VU 15 A1c Mexico, USA

### Family **DIPODIDAE**

Allactaga firouzi CR 15 B1+2c, C1 Iran

Allactaga tetradactyla EN <sup>15</sup> A1c Egypt, Libya

Cardiocranius paradoxus VU <sup>15</sup> A1c China, Kazakhstan, Mongolia

Eozapus setchuanus VU 15 Alc China

Euchoreutes naso EN 15 Alc China, Mongolia

Salpingotus crassicauda VU <sup>15</sup> A1c China, Kazakhstan, Mongolia

Sicista armenica
CR <sup>15</sup> Alc, Cl
Armenia, Azerbaijan, Georgia

Sicista caudata EN <sup>173</sup> B1+2c China, Russia

Family MURIDAE

Abrawayaomys ruschii EN <sup>15</sup> B1+2c Brazil

Acomys cilicicus CR 15 C2b Turkey

Acomys minous Spiny Mouse VU <sup>8</sup> B1+2c Greece

Akodon lindberghi VU <sup>15</sup> B1+2c Brazil

Akodon siberiae VU <sup>48</sup> D2 Bolivia

Alticola montosa VU 15 B1+2c India

Ammodillus imbellis VU 15 A1c Ethiopia, Somalia Andalgalomys olrogi VU 48 D2

Argentina

Anonymomys mindorensis Mindoro Climbing Rat VU <sup>86</sup> C2a Philippines

Anotomys leander EN 48 B1+2c Ecuador

Apodemus hermonensis
EN 15 B1+2c
Israel

Apomys gracilirostris VU <sup>86</sup> B1+2b, C2a Philippines

Apomys sacobianus VU <sup>86</sup> C2b Philippines

Archboldomys luzonensis Mt Isarog Shrew-mouse EN <sup>86</sup> C2b

Beamys hindei Lesser Hamster-rat VU <sup>15</sup> Alc Kenya, Tanzania

Philippines

Bunomys coelestis EN <sup>15</sup> B1+2c Indonesia Bunomys prolatus EN 15 B1+2c

Indonesia

Calomyscus hotsoni EN <sup>15</sup> B1+2c Pakistan

Chiropodomys karlkoopmani EN <sup>15</sup> B1+2c Indonesia

Chrotomys gonzalesi Mt Isarog Striped Rat CR 15 B1+2c Philippines

Chrotomys whiteheadi VU <sup>86</sup> B1+2c Philippines

Coccymys albidens
White-toothed Melomys
EN 15 B1+2c
Indonesia

Crateromys australis
Dinagat Island Cloud Rat
EN <sup>86</sup> A1c, B1+2b, C2b
Philippines

Crateromys heaneyi EN <sup>86</sup> A1c, C2b Philippines

Crateromys paulus CR <sup>86</sup> Alc, B1+2b, C2b Philippines

Crateromys schadenbergi
Giant Bushy-tailed Cloud Rat
VU <sup>86</sup> Alc, B1+2c
Philippines

Cremnomys elvira VU 15 C2b India

Crunomys celebensis EN <sup>15</sup> B1+2c Indonesia

Crunomys fallax CR 15 C2b Philippines

Dasymys montanus VU <sup>15</sup> B1+2c Uganda

Dendromus oreas VU 15 B1+2c Cameroon

Dendromus vernayi CR <sup>13</sup> B1+2c, C2b Angola

Dicrostonyx vinogradovi CR <sup>15</sup> B1+2c, C2b Russia Eliurus majori EN <sup>15</sup> B1+2c Madagascar

Eliurus penicillatus CR <sup>15</sup> B1+2c Madagascar

Ellobius alaicus EN 15 B1+2c Kyrgyzstan

Eropeplus canus EN 15 B1+2c Indonesia

Gerbillus allenbyi VU <sup>15</sup> B1+2c Israel

Gerbillus bilensis CR <sup>15</sup> B1+2c, C2b Ethiopia

Gerbillus bonhotei VU <sup>15</sup> B1+2c Egypt

Gerbillus burtoni CR 15 B1+2c, C2b Sudan

Gerbillus cosensis CR <sup>15</sup> C2b Kenya [R. Kozibir]

Gerbillus dalloni CR <sup>15</sup> C2b Chad

Gerbillus floweri CR <sup>15</sup> C2b Egypt

Gerbillus grobbeni CR <sup>15</sup> C2b Libya

Gerbillus hoogstraali CR <sup>15</sup> B1+2c, C2b Morocco

Morocco

Gerbillus lowei

CR 15 C2b

Gerbillus maghrebi VU 15 B1+2c

Sudan

Morocco

Gerbillus mauritaniae

CR 15 C2b

Mauritania

Gerbillus occiduus

CR 15 C2b

Morocco

Gerbillus principulus CR <sup>15</sup> C2b Sudan Gerbillus quadrimaculatus

CR 15 C2b Sudan

Gerbillus syrticus CR <sup>15</sup> C2b Libya

Grammomys gigas EN 15 B1+2c Kenya

Gymnuromys roberti VU 15 A2e

Madagascar

Habromys simulatus EN <sup>15</sup> C2a Mexico

Haeromys margarettae VU <sup>15</sup> Alc, Bl+2c Indonesia, Malaysia

Haeromys pusillus VU <sup>15</sup> A1c Indonesia, Malaysia, Philippines

Hybomys eisentrauti EN 15 B1+2c

Cameroon

Hydromys neobrittanicus VU 15 B1+2c

Papua New Guinea

Hypogeomys antimena EN 15 A2c

Ichthyomys pittieri VU 48 D2

VU 48 D2 Venezuela

Juscelinomys vulpinus VU 48 D2

Brazil

Komodomys rintjanus VU 15 B1+2c

Indonesia

Kunsia fronto

VU 15 C2a

Argentina, Brazil

Argentina, Brazil

Kunsia tomentosus

VU 15 C2a Bolivia, Brazil

Cameroon

Lamottemys okuensis EN 169 B1+2c

Leimacomys buettneri CR <sup>169</sup> B1+2c Ghana

Lemniscomys mittendorfi EN <sup>169</sup> B1+2c Cameroon

Leopoldamys neilli EN 15 A1c Thailand Leopoldamys siporanus VU 15 B1+2c

Indonesia

Leporillus conditor Greater Stick-nest Rat

EN 15 A1c Australia

Leptomys elegans CR <sup>15</sup> B1+2c Papua New Guinea

Leptomys signatus CR <sup>15</sup> B1+2c Papua New Guinea

Macrotarsomys ingens CR <sup>15</sup> B1+2c Madagascar

Macruromys elegans
Western Small-toothed Rat
CR <sup>15</sup> B1+2c
Indonesia

Macruromys major EN 15 C2a Papua New Guinea

Mallomys gunung CR <sup>15</sup> B1+2cd Indonesia

Margaretamys elegans VU <sup>15</sup> B1+2c Indonesia

Margaretamys parvus VU 15 B1+2c Indonesia

Mastomys pernanus VU 15 C2a Kenya, Rwanda, Tanzania

Maxomys alticola EN <sup>15</sup> C2a Malaysia

Maxomys baeodon EN <sup>15</sup> C2a Malaysia

Maxomys dollmani VU 15 C2a Indonesia

Maxomys wattsi EN 15 B1+2c Indonesia

Mayermys ellermani VU <sup>15</sup> C2a Papua New Guinea

Megadendromus nikolausi VU <sup>15</sup> B1+2c Ethiopia

Melasmothrix naso EN <sup>15</sup> B1+2c Indonesia



Melomys fellowsi
VU 15 B1+2c
Papua New Guinea
Melomys rubicola

Melomys rubicola CR <sup>15</sup> B1+2e Australia

Melomys spechti EN <sup>15</sup> B1+2c Solomon Islands

Meriones arimalius EN <sup>173</sup> B1+2c Oman, Saudi Arabia

Meriones chengi CR 15 C2b China

Meriones dahli EN <sup>173</sup> B1+2c Armenia

Meriones sacramenti EN <sup>15</sup> B1+2c Israel

Meriones zarudnyi
EN <sup>173</sup> B1+2c
Afghanistan, Turkmenistan

Mesembriomys macrurus
VU 15 Alce
Australia

Mesocricetus auratus EN <sup>15</sup> B1+2c Syria

Mesocricetus newtoni Romanian Hamster VU <sup>8</sup> D2 Bulgaria, Romania

Microtus evoronensis CR <sup>15</sup> B1+2c, C2b Russia

Microtus kermanensis EN <sup>15</sup> B1+2c, C2a Iran

Microtus mexicanus VU 15 C2a Mexico, USA

Microtus mujanensis CR <sup>15</sup> B1+2c, C2b Russia

Millardia kondana EN <sup>15</sup> B1+2c India

Muriculus imberbis VU 15 A1c Ethiopia

Mus famulus EN 15 B1+2c India Mus goundae VU <sup>15</sup> C2b Central African Republic

Mus kasaicus CR <sup>15</sup> B1+2c Zaire

Mus oubanguii VU <sup>15</sup> B1+2c Central African Republic

Myomys ruppi VU 15 B1+2c Ethiopia

Myospalax fontanierii VU <sup>15</sup> Ald China

Mystromys albicandatus VU <sup>15</sup> A1c South Africa, Swaziland

Nannospalax leucodon
VU <sup>8</sup> D2
Bulgaria, Greece, Hungary,
Romania, Turkey, Ukraine,
Yugoslavia

Nectomys parvipes CR 15 B1+2c French Guiana

Neohydromys fuscus VU <sup>15</sup> B1+2c Papua New Guinea

Neotoma anthonyi Anthony's Woodrat EN <sup>15</sup> A1c, B1+2c Mexico

Neotoma bryanti EN <sup>15</sup> B1+2c Mexico

Neotoma bunkeri Bunker's Woodrat EN <sup>15</sup> B1+2c Mexico

Neotoma fuscipes VU 15 A1c Mexico, USA

Neotoma martinensis San Martin Island Woodrat EN <sup>15</sup> B1+2c Mexico

Neotoma nelsoni EN 15 B1+2c Mexico

Neotoma varia EN 15 B1+2c Mexico

Nesoryzomys indefessus EN <sup>15</sup> B1+2c Ecuador (Galápagos ls) Neusticomys mussoi EN 15 B1+2c Venezuela

Neusticomys oyapocki EN <sup>15</sup> B1+2c French Guiana

Neusticomys peruviensis EN <sup>15</sup> B1+2c Peru

Neusticomys venezuelae EN <sup>15</sup> B1+2c Guyana, Venezuela

Notomys fuscus

Dusky Hopping-mouse

VU 15 Alce

Australia

Oecomys cleberi EN 15 B1+2c Brazil

Oligoryzomys victus EN <sup>15</sup> B1+2c St Vincent

Oryzomys galapagoensis CR <sup>15</sup> Alce Ecuador (Galápagos Is)

Oryzomys gorgasi CR 15 B1+2c Colombia

Otomys occidentalis EN <sup>15</sup> B1+2c Cameroon, Nigeria

Oxymycterus hiska VU <sup>48</sup> D2 Peru

Oxymycterus hucucha VU <sup>48</sup> D2 Bolivia

Palawanomys furvus EN <sup>86</sup> B1+2c, C2b Philippines

Papagomys armandvillei VU <sup>15</sup> B1+2c Indonesia

Paraleptomys wilhelmina VU <sup>15</sup> B1+2c Indonesia, Papua New Guinea

Paruromys ursinus EN <sup>15</sup> B1+2c Indonesia

Pelomys hopkinsi VU <sup>15</sup> B1+2c Kenya, Rwanda, Uganda

Pelomys isseli VU 15 B1+2c Uganda Peromyscus bullatus

EN 15 B1+2c

Mexico

Peromyscus caniceps

VU 15 B1+2c

Mexico

Peromyscus dickeyi

EN 15 B1+2c

Mexico

Peromyscus interparietalis

EN 15 B1+2c

Mexico

Peromyscus madrensis

VU 15 C2b

Mexico

Peromyscus mayensis

EN 15 B1+2c

Guatemala

Peromyscus mekisturus

VU 15 B1+2c

Mexico

Peromyscus melanurus

VU 15 B1+2c

Mexico

Peromyscus polius

VU 15 B1+2c

Mexico

Peromyscus pseudocrinitus

CR 15 B1+2c

Mexico

Peromyscus slevini

CR 15 B1+2c

Mexico

Peromyscus stephani

EN 15 B1+2c

Mexico

Peromyscus zarhynchus

VU 15 Alc

Mexico

Petromyscus barbouri

EN 15 B1+2c

South Africa

Phaenomys ferrugineus

EN 15 C2a

Brazil

Phaulomys andersoni

Wakayama Red-backed Vole

VU 15 D2

Japan

Phloeomys cumingi

Southern Giant Slender-tailed Cloud

VU 86 A1cd

Philippines

Podomys floridanus

Florida Mouse

VU 82 A1a+2d

USA

Pogonomelomys bruijni

CR 15 B1+2c

Indonesia, Papua New Guinea

Pogonomys championi

VU 15 B1+2c

Papua New Guinea

Praomys hartwigi

EN 15 B1+2c

Cameroon, Nigeria

Praomys minor

VU 169 BI+2c

Zaire

Praomys morio

VU 169 B1+2c

Cameroon

Pseudohydromys murinus

CR 15 B1+2c

Papua New Guinea

Pseudohydromys occidentalis

VU 15 B1+2c

Indonesia, Papua New Guinea

Pseudomys australis

VU 15 Alce

Australia

Pseudomys fieldi

CR 15 Alce

Australia

Pseudomys fumeus

Smoky Mouse

VU 15 AIce

Australia Pseudomys glaucus

CR 15 Alce

Australia

Pseudomys occidentalis

Western Mouse

EN 15 A2ce

Australia

Pseudomys oralis

Hastings River Mouse

EN 15 A1c+2c

Australia

Pseudomys patrius

VU 15 B1+2c

Australia

Pseudomys pilligaensis

Pilliga Mouse

VU 15 B1+2c

Australia

Pseudomys praeconis Shark Bay Mouse

VU 15 B1+2c

Australia

Rattus adustus

VU 15 D2

Indonesia

Rattus baluensis

EN 15 B1+2c

Malaysia

Rattus bontanus

VU 15 B1+2c

Indonesia

Rattus burrus

VU 15 D2 India

Rattus elaphinus VU 15 D2

Indonesia

Rattus enganus

CR 15 C2b

Indonesia

Rattus feliceus

VU is D2 Indonesia

Rattus hoogerwerfi

VU 15 D2

Indonesia

Rattus mindorensis

VU 15 B1+2c Philippines

Rattus mollicomulus

VU 15 B1+2c

Indonesia

Rattus montanus

CR 15 B1+2c Sri Lanka

Rattus palmarum

VU is D2 India (Andaman & Nicobar Is)

Rattus pelurus

VU 15 D2

Indonesia

Rattus ranjiniae

VU 15 D2 India

Rattus sikkimensis

VU 15 A1c

Cambodia, China, India, Laos,

Myanmar, Nepal?, Thailand, Viet Nam

Rattus tawitawiensis

Tawitawi Island Rat

VU 15 B1+2c

Philippines

Reithrodontomys raviventris

Salt-marsh Harvest Mouse VU 82 A1c+2c

USA



Reithrodontomys rodriguezi

VU 15 B1+2c

Costa Rica

Reithrodontomys spectabilis

EN 15 B1+2c

Mexico

Rhagomys rufescens

CR 15 B1+2c

Brazil

Rhipidamys scandens

VU 48 D2

Panama

Rhynchomys isarogensis

Mt Isarog Shrew-rat

VU 86 B1+2c

Philippines

Scolomys melanops

EN 48 B1+2c

Ecuador

Scolomys ucayalensi

EN 48 B1+2c

Peru

Sigmodon arizonae

EN 15 Alc

Mexico, USA

Sigmodontomys aphrastus

CR 15 B1+2c

Costa Rica

Salomys panceleti

Poncelet's Giant Rat

EN 15 B1+2c

Papua New Guinea, Solomon Islands

Solomys salamonis

VU 15 B1+2c

Solomon Islands

Solomys sapientis

VU 15 B1+2c

Papua New Guinea

Spalax arenarius

VU 15 Alc, B1+2c

Ukraine

Spalax giganteus VU 173 A1c, B1+2c

Kazakhstan, Russia

Spalax graecus

Greater Mole Rat

VU 8 D2

Romania, Ukraine

Spalax leucodon

Lesser Mole Rat

VU 8 D2

Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Hungary,

Macedonia, Romania, Slovenia, Turkey, Ukraine, Yugoslavia

Spalax microphthalmus

VU B D2

Russia, Ukraine

Steatomys jacksoni

VU 15 C2a

Ghana, Nigeria

Stenomys vandeuseni

EN 15 B1+2c

Papua New Guinea

Sundamys maxi

EN 15 C2a

Indonesia

Tachyoryctes ankoliae

VU 15 Alcd

Uganda

Tachyoryctes annectens

EN 15 B1+2c

Kenya

Tachyoryctes audax

VU 15 B1+2c

Kenya

Tachyoryctes naivashae

EN 15 B1+2cd

Kenya

Tachyoryctes rex EN 15 B1+2c

Kenya

Taeromys arcuatus

VU 15 D2

Indonesia

Taeromys hamatus VU 15 D2

Indonesia

Tarsomys echinatus

VU 86 A1c, B1+2b

Philippines

Tateomys macrocercus

VU 15 B1+2c

**Indonesia** 

Tateamys rhinogradoides

VU 15 B1+2c

Indonesia

Tokudaia muenninki

EN 15 A1c

Japan (Nansei-shoto)

Tokudaia osimensis

EN 15 B1+2c Japan (Nansei-shoto)

Tryphomys adustus

VU 86 A1c, B1+2b

**Philippines** 

Tylomys bullaris

CR 15 B1+2c Mexico

Tylomys panamensis VU 15 B1+2c

Panama

Tylomys tumbalensis

CR 15 B1+2c

Mexico

Typhlomys chapensis

CR 15 B1+2cd

Viet Nam

Uromys imperator

EN 15 B1+2c Solomon Islands

Uromys rex

VU 15 B1+2c

Solomon Islands

Vandeleuria nolthenii VU 15 B1+2c

Sri Lanka

Vernaya fulva

VU 15 C2a

China, Myanmar

Volemys kikuchii

VU 15 B1+2c

Taiwan

Xeromys myoides

False Water-rat

VU 15 Alc

Australia Zyzomys palatilis

CR 15 B1+2c

Australia Zyzomys pedunculatus

Central Rock-rat

CR 15 A1ce+2ce

Australia

Family PEDETIDAE

Pedetes capensis

VU 15 Alcd

Angola, Kenya, Mozambique,

Namibia, South Africa, Tanzania, Zaire, Zambia, Zimbabwe

Family CTENODACTYLIDAE

Felovia vae

Felou Gundi

VU 15 Alc

Mali, Mauritania, Senegal

Family MYOXIDAE

Dryomys sichuanensis

EN 15 B1+2c

China

Eliomys quercinus

Garden Dormouse

VU 8 Alc

Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech

Republic, Estonia, Finland, France, Germany, Italy, Latvia, Lithuania,

Macedonia, Netherlands, Portugal,

Romania, Slovakia, Slovenia, Spain, Switzerland, Ukraine, Yugoslavia

Glirulus japonicus

Japanese Dormouse EN 15 A1c

Japan

Graphiurus ocularis

VU 15 Alcd South Africa

Myomimus personatus

VU 173 B1+2c

lran, Turkmenistan, Uzbekistan

Mvomimus roachi

Mouse-tailed Dormouse

VU 8 D2 Greece, Turkey

Myomimus setzeri

EN 15 Alc

Iran

Selevinia betpakdalaensis

EN 173 B1+2c

Kazakhstan

Family HYSTRICIDAE

Hystrix brachyura

VU 15 Ald

China, India, Indonesia, Malaysia, Myanmar, Nepal, Singapore,

Thailand

Family ERETHIZONTIDAE

Sphiggurus vestitus

VU is C2a

Colombia, Venezuela

Family CHINCHILLIDAE

Chinchilla brevicaudata

Short-tailed Chinchilla

CR 132 A1cd Argentina, Bolivia, Chile, Peru (ex?)

Chinchilla lanigera

Long-tailed Chinchilla

VU 48 Alcd

Chile

Family DINOMYIDAE

Dinomys branickii

Pacarana

EN 15 Alcd

Bolivia, Brazil, Colombia, Ecuador,

Peru, Venezuela

Family DASYPROCTIDAE

Dasyprocta azarae

VU 15 Alcd

Argentina, Brazil, Paraguay

Dasyprocta coibae

EN 15 B1+2ce

Dasyprocta ruatanica

EN 15 Alcde, B1+2e

Honduras

Family OCTODONTIDAE

Octodon pacificus

VU 48 D2

Chile

Tympanoctomys barrerae

Red Vizcacha Rat

VU 48 Ala

Argentina

Family ABROCOMIDAE

Abrocoma boliviensis

VU 48 D2

Bolivia

Family ECHIMYIDAE

Chaetomys subspinosus

Thin-spined Porcupine

VU is A2c

Brazil

Clyomys bishopi

VU IS D2

Brazil

Diplomys rufodorsalis

VU 15 B1+2c

Colombia

Echimys chrysurus

VU 15 A2ce

Brazil

Echimys thomasi

VU 15 D2

Brazil

Family CAPROMYIDAE

Geocapromys brownii

Jamaican Hutia

VU 15 Alcd

Jamaica

Geocapromys ingrahami

Bahamian Hutia

VU 15 D2

Bahamas

Isolobodon portoricensis

CR 15 B1+2c

Dominican Republic, Haiti, Puerto

Rico? [int]

Mesocapromys angelcabrerai

Cabrera's Hutia CR 15 B1+2ce

Cuba

Mesocapromys auritus

Large-eared Hutia

CR 15 B1+2ce

Cuba

Mesocapromys nanus

**Dwarf Hutia** 

CR 15 B1+2de

Cuba

Mesocapromys sanfelipensis

Little Earth Hutia

CR 15 C2b

Cuba

Mysateles garridoi

Garrido's Hutia

CR 15 D1

Cuba

Mysateles gundlachi

Chapman's Prehensile-tailed Hutia

VU 15 A2c

Cuba

Plagiodontia aedium

Hispaniolan Hutia

VU 15 Alac

Dominican Republic, Haiti

Order LAGOMORPHA

Family OCHOTONIDAE

Ochotona helanshanensis

Helan Shan Pika CR 104 A2cd

China

Ochotona iliensis

lli Pika

VU 104 D1+2

China

Ochotona koslowi

Koslov's Pika

EN 104 B1+2abd

China

Ochotona pusilla

Steppe Pika

VU 104 A1cd, C2a Kazakhstan, Russia

Family LEPORIDAE

Bunolagus monticularis

Riverine Rabbit

EN 104 B1+2c

South Africa

Caprolagus hispidus

Hispid Hare

EN 104 A1c+2c, B1+2abcde, C1

Bangladesh, India, Nepal

Lepus castrovieioi

Broom Hare

VU 104 B2c+3c, C2b Spain

Lepus flavigularis

Tehuantepec Jackrabbit EN 104 Alac

Mexico

Lepus hainanus

Hainan Hare

VU 104 Alac

China



Nesolagus netscheri Sumatran Rabbit

CR <sup>104</sup> B1+2abcde, C2a Indonesia

Pentalagus furnessi Amami Rabbit

EN <sup>104</sup> A2b, B1+2bce, C1 Japan

Romerolagus diazi Volcano Rabbit

EN 104 Alabe+2be, B1+2bed+3abe, C1+2a

Mexico

Sylvilagus dicei Dice's Cottontail

> EN <sup>104</sup> A1c+2bc, B2c+3c Costa Rica, Panama

Sylvilagus graysoni Tres Marias Rabbit

**EN** <sup>104</sup> A1ac+2c, B1+2c, C1+2a Mexico

Sylvilagus insonus Omiltemi Rabbit

CR 104 A1ac, B1+2c Mexico

Sylvilagus transitionalis
New England Cottontail
VU 104 Alae, C1+2a
USA

### Order MACROSCELIDEA

### Family MACROSCELIDIDAE

Elephantulus edwardii VU % B1+2c South Africa

Elephantulus revoili EN % B1+2c

Elephantulus rupestris VU % B1+2c South Africa

Macroscelides proboscideus VU 96 B1+2c

Namibia, South Africa

Rhynchocyon chrysopygus Golden-rumped Elephant-shrew

EN <sup>96</sup> B1+2c Kenya

Rhynchocyon cirnei VU <sup>96</sup> B1+2c Malawi, Mozambique, Tanzania, Uganda, Zaire, Zambia

Rhynchocyon petersi
Black-and-rufous Elephant-Shrew
EN % B1+2c
Kenya, Tanzania

### Class AVES

#### Order CASUARIIFORMES

### Family CASUARIIDAE

Casuarius casuarius Southern Cassowary VU <sup>21</sup> Alacde+2cde Australia, Indonesia, Papua New Guinea

Casuarius unappendiculatus Northern Cassowary

VU <sup>21</sup> Alacd+2cd Indonesia, Papua New Guinea

### Order APTERYGIFORMES

### Family APTERYGIDAE

Apteryx australis Brown Kiwi VU <sup>21</sup> Ale New Zealand

Apteryx haastii Great Spotted Kiwi VU <sup>21</sup> B1+2e New Zealand

Apteryx owenii
Little Spotted Kiwi
VU <sup>21</sup> D2
New Zealand

#### Order TINAMIFORMES

### Family TINAMIDAE

Crypturellus kerriae Chocó Tinamou VU <sup>21</sup> B1+2c, C2a Colombia, Panama

Crypturellus ptaritepui Tepuí Tinamou

VU <sup>21</sup> D2 Venezuela

Crypturellus saltuarius Magdalena Tinamou CR <sup>21</sup> B1+2c, C2b

Colombia

Nothoprocta kalinowskii Kalinowski's Tinamou

CR <sup>21</sup> D1 Peru

Nothoprocta taczanowskii Taczanowski's Tinamou

VU 21 C2a Peru

Nothura minor Lesser Nothura VU <sup>21</sup> A1c, C2a Brazil Taoniscus nanus
Dwarf Tinamou
VU 21 A1c, C2a

Argentina (ex?), Brazil

### Order SPHENISCIFORMES

### Family SPHENISCIDAE

Eudyptes pachyrhynchus Fiordland Penguin VU <sup>21</sup> C2a

New Zealand

Eudyptes robustus

Eudyptes robustus
Snares Islands Penguin
VU 21 D2
New Zealand

Eudyptes sclateri Erect-crested Penguin VU 21 D2

New Zealand

Megadyptes antipodes
Yellow-eyed Penguin

VU <sup>21</sup> C2a

New Zealand (Auckland 1s, Campbell 1d)

Spheniscus mendiculus Galápagos Penguin VU <sup>21</sup> A1a, C2b Ecuador

### Order PODICIPEDIFORMES

### Family PODICIPEDIDAE

Podiceps taczanowskii
Junin Grebe

CR <sup>21</sup> Alace+2ce, B1+2cde, CI+2b

Peru

Poliocephalus rufopectus New Zealand Dabchick EN <sup>21</sup> C2a

New Zealand

Tachybaptus pelzelnii Madagascar Grebe

VU <sup>21</sup> Alace+2ce, Cl+2b Madagascar

Tachybaptus rufolavatus Alaotra Grebe

CR <sup>21</sup> D1 Madagascar

### Order PROCELLARIIFORMES

#### Family DIOMEDEIDAE

Diomedea albatrus
Short-tailed Albatross
EN <sup>21</sup> C1
China (ex), Japan. \* Russia, Taiwan,
USA (Hawaijan 1s)

Diomedea amsterdamensis

Amsterdam Albatross

CR 21 D1

French Southern and Antarctic Territories (Amsterdam Id)

Diomedea exulans

Wandering Albatross

VU 21 Alad+2d

Australia, French Southern and Antarctic Territories, New Zealand, South Africa, South Georgia, St Helena

### Family PROCELLARIIDAE

Procellaria parkinsoni

Black Petrel

VU 21 D2

New Zealand \* Ecuador, Peru

Procellaria westlandica

Westland Petrel

VU 21 D2

New Zealand. \* Australia, Chile

Pterodroma aterrima

Mascarene Black Petrel

CR 21 D1 Réunion

Pterodroma axillaris

Chatham Islands Petrel

CR 21 BI+2e

New Zealand (Chatham Is)

Pterodroma baraui

Barau's Petrel

CR 21 A1d

Réunion

Pterodroma becki

Beck's Petrel

CR 21 D1

Papua New Guinea (ex?), Solomon Islands (ex?)

Pterodroma cahow

Bermuda Petrel

EN 21 D1

Bermuda

Pterodroma caribbaea

Jamaica Petrel

CR 21 C2b

Jamaica

Pterodroma cervicalis

White-necked Petrel

VU 21 D2

New Zealand, Norfolk Island

Pterodroma cookii

Cook's Petrel

VU 21 D2.

New Zealand. \* Chile, Peru

Pterodroma defilippiana

Defilippe's Petrel

VU 21 D2

Chile (Desventuradas Is, Juan

Fernandez Is)

Pterodroma feae

Fea's Petrel

VU 21 D1+2

Cape Verde, Portugal (Madeira)

Pterodroma hasitata

Black-capped Petrel

EN 21 C2a

Cuba, Dominican Republic, Haiti

Pterodroma incerta

Atlantic Petrel

VU 21 D2

St Helena

Pterodroma macgillivrayi

Fiji Petrel

CR 21 C2b, D1

Fiii

Pterodroma madeira

Zino's Petrel

CR 21 D1

Portugal (Madeira)

Pterodroma magentae

Magenta Petrel

CR 21 B1+2e, C2b

New Zealand (Chatham Is)

Pterodroma phaeopygia

Galápagos Petrel CR 21 Alace+2ce

Ecuador (Galápagos Is). \* Chile,

Colombia (Malpelo Id), Costa Rica, Ecuador, French Polynesia, Mexico,

Panama, Peru

Pterodroma pycrofti

Pycroft's Petrel

VU 21 C2a

New Zealand, Norfolk Island (ex)

Pterodroma sandwichensis

Hawaiian Petrel

VU 21 D2

USA (Hawaiian Is). \* French

Polynesia?, Kiribati

Pterodroma solandri

Providence Petrel

VU 21 D2

Australia, Norfolk Island (ex)

Puffinus auricularis

Townsend's Shearwater

VU 21 Ale+2e, B1+2e, C1+2b

Mexico (Revillagigedos Is)

Puffinus creatopus

Pink-footed Shearwater

VU 21 D2

Chile (Juan Fernandez Is). \* Cocos

(Keeling) Islands, Costa Rica.

Ecuador, Peru, USA

Puffinus heinrothi

Heinroth's Shearwater

EN 21 C2b

Papua New Guinea, Solomon Islands

Puffinus huttoni

Hutton's Shearwater

EN 21 B1+2bce

New Zealand

Puffinus newelli

Newell's Shearwater

VU 21 D2

USA

Puffinus opisthomelas

Black-vented Shearwater

VU 21 D2

Mexico

Family HYDROBATIDAE

Oceanodroma macrodactyla Guadalupe Storm-petrel

CR 21 D1

Mexico

Family PELECANOIDIDAE

Pelecanoides garnotii

Peruvian Diving-petrel EN 21 Ala

Chile, Peru

Order PELECANIFORMES

Family PELECANIDAE

Pelecanus crispus

Dalmatian Pelican

VU 21 C2a

Albania, Armenia, Azerbaijan,

Bulgaria, China, Greece, Iran, Kazakhstan, Mongolia, Romania,

Russia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia. \*

Afghanistan, Bangladesh, Egypt, Hong Kong, India, Iraq, Lebanon, Pakistan, Syria

Pelecanus philippensis

Spot-billed Pelican

VU 21 Alacde, C1 India, Sri Lanka. \* Bangladesh,

Cambodia, China, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Viet Nam

Family SULIDAE

Papasula abbotti

Abbott's Booby

VU 21 C2b, D2

Christmas Island, Cocos (Keeling)

Islands, Costa Rica?. \* Indonesia, Mauritius (ex), Seychelles (ex)



### Family PHALACROCORACIDAE

Phalacrocorax campbelli

Campbell Island Shag

VU 21 D2

New Zealand

Phalacrocorax carunculatus

New Zealand King Shag

VU 21 D1+2

New Zealand

Phalacrocorax chalconotus

Stewart Island Shag

VU 21 C2a

New Zealand

Phalacrocorax colensoi

Auckland Islands Shag

VU 21 D2

New Zealand

Phalacrocorax featherstoni

Pitt Island Shag

VU 21 D2

New Zealand

Phalacrocorax harrisi Galápagos Cormorant

VU 21 B1+3c, D1+2

Ecuador (Galápagos Is)

Phalacrocorax onslowi

Chatham Islands Shag

VU 21 B1+2d, D1

New Zealand (Chatham Is)

Phalacrocorax ranfurlyi

Bounty Islands Shag

VU 21 D2

New Zealand

Family FREGATIDAE

Fregata andrewsi

Christmas Island Frigatebird

VU 21 D2

Christmas Island. \* Brunei, China, Cocos (Keeling) Islands, Hong

Kong, Indonesia, Malaysia, Myanmar, Singapore, Solomon Islands, Thailand, Viet Nam

Fregata aquila

Ascension Frigatebird

CR 21 B1+2e

St Helena (Ascension)

Order CICONIIFORMES

Family ARDEIDAE

Ardea humbloti

Madagascar Heron

VU 21 C2a

Comoros?, Madagascar. \* Comoros,

Mayotte

Ardea insignis

White-bellied Heron

EN 21 C1+2a

Bangladesh, Bhutan, India,

Myanmar, Nepal (ex)

Botaurus poiciloptilus Australasian Bittern

EN 21 C2a

Australia, New Caledonia, New

Zealand

Egretta eulophotes

Chinese Egret

EN 21 C1

China, Hong Kong?, North Korea,

South Korea. \* Brunei, Indonesia, Japan, Malaysia, Philippines, Russia, Singapore, Taiwan, Thailand,

Viet Nam

Egretta vinaceigula

Slaty Egret

VU 21 C2a

Botswana, Namibia, Zambia?

Gorsachius goisagi

Japanese Night-heron

VU 21 C1+2a

Japan. \* Brunei, China, Hong Kong, Indonesia, Palau, Philippines, Russia,

South Korea, Taiwan

Gorsachius magnificus

White-eared Night-heron

CR 21 C1+2a

China. \* Viet Nam

Family CICONIIDAE

Ciconia boyciana

Oriental Stork

EN 21 C1

China, Russia. \* Bangladesh, Hong

Kong, India, Japan, Myanmar, North

Korea, South Korea, Taiwan

Ciconia stormi

Storm's Stork

EN 21 C1+2a

Indonesia, Malaysia, Thailand. \*

Brunei, Malaysia

Leptoptilos dubius Greater Adjutant

EN 21 C1

Bangladesh, Cambodia (ex?), India, Laos (ex?), Myanmar (ex?),

Viet Nam (ex?). \* Nepal, Thailand

Leptoptilos javanicus

Lesser Adjutant

VIJ 21 C1

Bangladesh, Cambodia?, China, India, Indonesia, Laos?, Malaysia, Myanmar, Nepal, Sri Lanka. Thailand, Viet Nam. \* Bhutan.

Brunei, Singapore

Mycteria cinerea Milky Stork

VU 21 C1

Cambodia, Indonesia, Malaysia,

Thailand (ex), Viet Nam

Family THRESKIORNITHIDAE

Bostrychia bocagei

Dwarf Olive Ibis

CR 21 D1

São Tomé & Príncipe

Geronticus calvus

Southern Bald Ibis

VU 21 C2b

Lesotho, South Africa, Swaziland

Geronticus eremita

Northern Bald Ibis

CR 21 C2a

Algeria, Egypt (ex), Morocco, Saudi Arabia, Senegal (ex), Turkey (ex). \*

Ethiopia, Syria, Yemen

Nipponia nippon

Crested Ibis

CR 21 C2b, D1

China, Japan (ex), North Korea (ex)

Platalea minor

Black-faced Spoonbill

CR 21 A2c

China, North Korea, South Korea, \*

Cambodia, China, Hong Kong, Japan, Philippines, Taiwan,

Thailand, Viet Nam

Pseudibis davisoni

White-shouldered Ibis

EN 21 C1+2a

Cambodia?, China, Indonesia, Laos?,

Myanmar?, Thailand, Viet Nam. \* Malaysia

Pseudibis gigantea

Giant Ibis

CR 21 C1

Cambodia (ex?), Laos, Thailand, Viet Nam

Family PHOENICOPTERIDAE

Phoenicopterus andinus

Andean Flamingo

VU 21 A2cd

Argentina, Bolivia, Chile, Peru

Phoenicopterus jamesi

Puna Flamingo

VU 21 A2cd

Argentina, Bolivia, Chile, Peru

#### Order ANSERIFORMES

#### Family ANATIDAE

Anas aucklandica

Brown Teal

VU 21 B1+2bcde New Zealand

Anas bernieri

Madagascar Teal

EN 21 C2b

Madagascar

## Anas formosa

Baikal Teal

VU 21 Alade, D2

Russia. \* China, Japan, North Korea, South Korea, Taiwan

### Anas laysanensis

Laysan Duck

VU 21 D1+2

USA

#### Anas wyvilliana

Hawaiian Duck

VU 21 D2

USA [int] (Hawaiian Is)

#### Anser cygnoides

Swan Goose

VU 21 Alcd+2cd

China, Kazakhstan, Mongolia, Russia. \* China, Japan, North Korea,

South Korea, Taiwan

### Anser erythropus

Lesser White-fronted Goose

VU 21 Alacd

Finland, Norway, Russia, Sweden. \* Albania, Bulgaria, China, Greece, Hungary, India, Iran, Iraq, Japan,

Latvia, Pakistan, Romania, Turkey, Turkmenistan, Yugoslavia

#### Aythya baeri

Baer's Pochard

VU 21 Alac, Cl

China, North Korea?, Russia. \* Bangladesh, Hong Kong, India,

Japan, Myanmar, Nepal, South Korea, Taiwan, Thailand, Viet Nam

### Aythya innotata

Madagascar Pochard

CR 21 D1

Madagascar

## Aythya nyroca

Ferruginous Duck

VU 21 Alacd

Afghanistan, Albania, Armenia, Austria, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czech Republic, Georgia,

Germany, Greece, Hungary, India, Iran, Israel, Italy, Kazakhstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Morocco,

Poland, Romania, Russia, Saudi Arabia, Slovenia, Spain, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia. \* Algeria,

Bangladesh, Belgium, Bhutan, Cameroon, Central African Republic, Chad, Cyprus, Egypt, Ethiopia, France, Iraq, Jordan, Lebanon,

Libya, Mali, Malta, Myanmar, Nepal, Netherlands, Niger, Nigeria, Oman, Pakistan, Senegal, Sudan, Switzerland, Thailand, Tunisia,

United Arab Emirates, Viet Nam, Yemen

#### Branta ruficollis Red-breasted Goose

VU 21 A2cd, B1+2cd Russia. \* Bulgaria, Greece, Hungary, Iran, Iraq, Kazakhstan, Romania, Turkey, Turkmenistan, Ukraine

#### Branta sandvicensis

Nene

VU 21 D1

USA (Hawaiian Is)

#### Cairina scutulata

White-winged Duck

EN 21 C1+2a

Bangladesh, Cambodia?, India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Viet Nam

#### Dendrocygna arborea

West Indian Whistling-duck

VU 21 C2a

Antigua and Barbuda, Bahamas, Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico, St Kitts and Nevis, Turks and Caicos Islands, Virgin Islands (British), Virgin Islands (US)

#### Hymenolaimus malacorhynchus Blue Duck

VU 21 C2a

New Zealand

#### Marmaronetta angustirostris Marbled Teal

VU 21 A2c

Afghanistan, Algeria, Armenia, Azerbaijan, China?, Egypt?, Georgia, Iran, Iraq, Israel, Kazakhstan, Morocco, Pakistan?, Russia, Senegal, Spain, Tajikistan, Tunisia (ex?), Turkey, Turkmenistan, Uzbekistan. \* Chad, Egypt, India, Mali, Morocco, Pakistan, Turkey

## Mergus octosetaceus

Brazilian Merganser

CR 21 A2ce, C2a, D1 Argentina, Brazil, Paraguay

#### Mergus squamatus

Scaly-sided Merganser

VU 21 C1+2a

China, North Korea, Russia. \* Japan, South Korea

Oxyura leucocephala

## White-headed Duck

VU 21 A2e

Afghanistan, Algeria, France, Iran, Kazakhstan, Mongolia, Romania, Russia, Spain, Tunisia, Turkey, Turkmenistan, Uzbekistan. \* Albania, Azerbaijan, Bulgaria, China, Cyprus, Egypt, Greece, India, Iraq, Israel, Italy, Morocco, Pakistan, Saudi Arabia, Syria, Tajikistan

### Polysticta stelleri

Steller's Eider

VU 21 Ala

Russia, USA. \* Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Sweden

### Rhodonessa caryophyllacea

Pink-headed Duck

CR 21 D1

India, Myanmar, Nepal

### Salvadorina waigiuensis

Salvadori's Teal

VU 21 C2a

Indonesia, Papua New Guinea

#### Somateria fischeri

Spectacled Eider

VU 21 Ala

Russia, USA

#### Stictonetta naevosa

Freckled Duck

VU 21 B1+3d

Australia

### Tadorna cristata

Crested Shelduck

CR 21 D1

China?, North Korea?, Russia. \* China?, Japan, South Korea

### Order FALCONIFORMES

#### Family CATHARTIDAE

Gymnogyps californianus California Condor

CR 21 D1

USA [re-int]

#### Family ACCIPITRIDAE

Accipiter brachyurus New Britain Sparrowhawk

VU 21 C1

Papua New Guinea



Accipiter gundlachi Gundlach's Hawk

EN 21 C2a Cuba

Accipiter imitator Imitator Sparrowhawk

EN 21 C2a

Papua New Guinea, Solomon Islands

Aquila adalberti Spanish Imperial Eagle

VU 21 D1

Algeria (ex), Portugal, Spain. \* Morocco

Aquila clanga Greater Spotted Eagle

VII 21 C2a Belarus, China, Finland, India, Iran, Kazakhstan, Latvia, Moldova, Mongolia, Pakistan, Poland, Romania, Russia, Ukraine. \* Afghanistan, Bangladesh, Bulgaria, Cambodia, Czech Republic, Egypt, Ethiopia, France, Germany, Greece, Hong Kong, Hungary, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Laos, Lebanon, Malaysia, Morocco, Myanmar, Nepal, Oman, Saudi Arabia, Singapore, Slovakia, Sudan, Sweden, Thailand, Turkey, United Arab Emirates, Viet Nam, Yemen

Aquila heliaca Imperial Eagle

VU 21 C2a Albania?, Azerbaijan, Bulgaria, China, Croatia, Cyprus, Georgia, Greece, Hungary, Iran, Kazakhstan, Macedonia, Moldova, Romania, Russia, Slovakia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia. \* Afghanistan, Bangladesh, Djibouti, Egypt, Ethiopia, Hong Kong, India, Iraq, Israel, Jordan, Kuwait, Laos, Lebanon, Nepal, Oman, Pakistan, Saudi Arabia, Sudan, Syria, United Arab Emirates, Viet Nam, Yemen

Buteo galapagoensis Galápagos Hawk VU 21 DI Ecuador (Galápagos Is)

Buteo ridgwayi Hispaniolan Hawk EN 21 C2a

Dominican Republic, Haiti

Erythrotriorchis radiatus Red Goshawk EN 21 C2b Australia

Eutriorchis astur

Madagascar Serpent-eagle CR 21 C1+2a

Madagascar

Gyps coprotheres Cape Griffon

ŶU 21 Alade+2de, Cl+2b Botswana, Lesotho, Mozambique, Namibia, South Africa, Zimbabwe (ex). \* Swaziland

Haliaeetus leucoryphus

Pallas's Sea-eagle

VU 21 C1+2b

Bangladesh, Bhutan, China, India, Kazakhstan, Mongolia, Myanmar, Nepal, Pakistan, Russia?, Tajikistan, Uzbekistan. \* Afghanistan

Haliaeetus pelagicus Steller's Sea-eagle

VU 21 C1+2b Russia. \* Japan, North Korea?, South Korea

Haliaeetus sanfordi Sanford's Fish-eagle

VU 21 C1+2a Papua New Guinea, Solomon Islands

Haliaeetus vociferoides Madagascar Fish-eagle

CR 21 C2b Madagascar

Harpyhaliaetus coronatus

Crowned Eagle

VU 21 C2b

Argentina, Bolivia, Brazil, Paraguay, Uruguay

Harpyopsis novaeguineae New Guinea Harpy Eagle

VU 21 C1+2b

Indonesia, Papua New Guinea

Leucopternis lacernulata White-necked Hawk

VU 21 C1+2a, D1

Brazil

Leucopternis occidentalis

Grev-backed Hawk

EN 21 C2a Ecuador, Peru

Lophoictinia isura

Square-tailed Kite VU 21 C2b Australia

Pithecophaga jefferyi

Philippine Eagle CR 21 Cl **Philippines** 

Spizaetus bartelsi Javan Hawk-eagle EN 21 C1+2b

Indonesia

Spizaetus nanus

Wallace's Hawk-eagle VU 21 Alc+2c, C1+2a Brunei, Indonesia, Malaysia, Myanmar, Thailand

Spizaetus philippensis Philippine Hawk-eagle VU 21 A1c+2c, C1+2a Philippines

### Family FALCONIDAE

Falco araea Seychelles Kestrel VU 21 D1 Seychelles

Falco fasciinucha Taita Falcon VU 21 C1, D1 Ethiopia, Kenya, Malawi, Mozambique, South Africa, Tanzania, Zambia, Zimbabwe

Falco hypoleucos Grey Falcon VU 21 C2b Australia

Falco naumanni Lesser Kestrel

VU 21 Alace Afghanistan, Albania?, Algeria, Armenia, Austria, Azerbaijan, Bulgaria, China, Croatia, France, Georgia, Gibraltar, Greece, Hungary, Iran, Iraq?, Israel, Italy, Jordan, Kazakhstan, Kyrgyzstan, Lebanon?, Libya, Macedonia, Moldova, Mongolia, Morocco, Poland?, Portugal, Romania, Russia, Saudi Arabia, Slovenia, Spain, Switzerland?, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia. \* Angola, Bahrain, Bangladesh, Benin, Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Congo, Côte d'Ivoire, Cyprus, Djibouti, Egypt, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau?, India, Iraq, Kenya, Kuwait, Laos, Lebanon, Lesotho, Liberia, Malawi, Maldives, Mali, Malta, Mauritania, Mozambique, Myanmar, Namibia, Nepal, Niger, Nigeria, Oman, Pakistan, Poland, Qatar, Rwanda, Senegal, Sierra Leone?, Somalia, South Africa, Sudan, Tanzania, Togo?, Turkey, Uganda, United Arab Emirates, Western Sahara?, Yemen, Zaire, Zambia, Zimbabwe

Falco punctatus Mauritius Kestrel

EN 21 D1

Mauritius

Micrastur plumbeus Plumbeous Forest-falcon

EN 21 C2a Colombia, Ecuador

#### Order GALLIFORMES

#### Family MEGAPODIIDAE

Aepypodius bruijnii Bruijn's Brush-turkey VU 21 D1

Indonesia

Leipoa ocellata

Malleefowl

VU 21 A1ce+2ce, C1+2a

Anstralia

Macrocephalon maleo

Maleo

VU 21 C1+2a

Indonesia

Megapodius laperouse Micronesian Scrubfowl

VU 21 C1

Guam (ex), Northern Marianas, Palau

Megapodius layardi

Vanuatu Scrubfowl VU 21 A2cd

Vanuatu

Megapodius nicobariensis

Nicobar Scrubfowl VU 21 C1

India (Andaman & Nicobar Is)

Megapodius pritchardii Niaufoou Scrubfowl

EN 21 B1+2e, C2a

Tonga

Megapodius wallacei

Moluccan Scrubfowl

VU 21 A2cd, C1

Indonesia

### Family CRACIDAE

Crax alberti

Blue-billed Curassow

CR 21 C2a Colombia

Crax blumenbachii Red-billed Curassow

CR 21 C2a

Brazil

Crax globulosa

Wattled Curassow

VU 21 A1cd+2cd, C1+2a Bolivia, Brazil, Colombia, Ecuador, Peru

Oreophasis derbianus

Horned Guan

VIJ 21 C2a

Guatemala, Mexico

Ortalis erythroptera

Rufous-headed Chachalaca

VU 21 C1+2a

Ecuador, Peru

Pauxi pauxi Northern Helmeted Curassow

EN 21 C2a

Colombia, Venezuela

Pauxi unicornis

Southern Helmeted Curassow

EN 21 C2a Bolivia, Peru

Penelope albipennis

White-winged Guan

CR 21 C2a Peru

Penelope barbata

Bearded Guan

VU 21 A2cd, C1+2a

Ecuador, Peru

Penelope ochrogaster

Chestnut-bellied Guan

VU 21 C2a Brazil

Penelope ortoni

Baudó Guan

VU 21 A1cd+2cd, C1+2a Colombia, Ecuador

Penelope perspicax

Cauca Guan

EN 21 C2a

Colombia

Pipile jacutinga

Black-fronted Piping-guan

VU 21 C2a

Argentina, Brazil, Paraguay

Pipile pipile

Trinidad Piping-guan

CR 21 C2a

Trinidad and Tobago

### Family PHASIANIDAE

Afropavo congensis Congo Peafowl

VU 21 C2b

Zaire

Agelastes meleagrides

White-breasted Guineafowl

VU 21 A1cd+2cd

Côte d'Ivoire, Ghana (ex?), Guinea,

Liberia, Sierra Leone

Arborophila ardens

Hainan Partridge EN 21 Alcd, C1

China

Arborophila cambodiana

Chestnut-headed Partridge VU 21 B1+2c, C1+2a

Cambodia, Thailand

Arborophila charltonii

Chestnut-necklaced Partridge

VU 21 Alc

Indonesia, Malaysia, Thailand, Viet Nam

Arborophila davidi

Orange-necked Partridge

CR 21 B1+2c, C1

Viet Nam

Arborophila gingica

White-necklaced Partridge

VU 21 C1+2a

China

Arborophila mandellii

Chestnut-breasted Partridge

VU 21 C1+2a

Bhutan, China, India

Arborophila merlini

Annam Partridge EN 21 B1+2c

Viet Nam

Arborophila rufipectus

Sichuan Partridge

CR 21 B1+2c China

Catreus wallichi

Cheer Pheasant

VU 21 C2a India, Nepal, Pakistan

Crossoptilon crossoptilon

White Eared-pheasant

VU 21 C2a

China Crossoptilon harmani

Tibetan Eared-pheasant

VU 21 C2a China

Crossoptilon mantchuricum

Brown Eared-pheasant

VU 21 B1+2c China

Dendrortyx barbatus

Bearded Wood-partridge

CR 21 A2cd

Mexico

Francolinus camerunensis

Mount Cameroon Francolin

VU 21 D2 Cameroon

Francolinus griseostriatus

Grey-striped Francolin

VU 21 B1+2bc, C2a

Angola



Francolinus gularis

Swamp Francolin

VU 21 Alc

Bangladesh, India, Nepal

Francolinus harwoodi

Harwood's Francolin

VU 21 B1+2c, C2a

Ethiopia

Francolinus ochropectus

Diibouti Francolin

CR 21 Alac+2c

Djibouti

Francolinus swierstrai

Swierstra's Francolin

VU 21 B1+2abc, C2a

Angola

Lophophorus lhuysii

Chinese Monal

VU 21 C2a

China

Lophophorus sclateri

Sclater's Monal

VU 21 C1+2a

China, India, Myanmar

Lophura bulweri

Bulwer's Pheasant

VU 21 C2a

Brunei, Indonesia, Malaysia

Lophura diardi

Siamese Fireback

VU 21 Alcd+2cd

Cambodia, Laos, Thailand, Viet Nam

Lophura edwardsi

Edwards's Pheasant

CR 21 B1+2c, C1+2a, D1

Viet Nam

Lophura erythrophthalma

Crestless Fireback

VU 21 A1c+2c

Brunei, Indonesia, Malaysia

Lophura hatinensis

Vietnamese Pheasant

EN 21 B1+2c, C1

Viet Nam

Lophura hoogerwerfi

Sumatran Pheasant

VU 21 B1+2c, C1+2a

Indonesia

Lophura ignita

Crested Fireback

VU 21 A1cd+2cd Brunei, Indonesia, Malaysia,

Myanmar, Thailand

Lophura imperialis

Imperial Pheasant

CR 21 C1+2b Laos?, Viet Nam

Lophura inornata

Salvadori's Pheasant

VU 21 C1+2a

Indonesia

Odontophorus strophium

Gorgeted Wood-quail

EN 21 B1+2c

Colombia

Ophrysia superciliosa

Himalayan Quail

CR 21 D1

India

Pavo muticus

Green Peafowl

VU 21 A1cd+2cd

Bangladesh (ex?), Cambodia, China,

India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Viet Nam

Perdicula manipurensis

Manipur Bush-quail

VU 21 C1+2a

Bangladesh, India

Polyplectron emphanum

Palawan Peacock-pheasant

EN 21 C2a

**Philippines** 

Polyplectron germaini

Germain's Peacock-pheasant

VU 21 B1+2c, C1+2a

Laos?, Viet Nam

Polyplectron inopinatum

Mountain Peacock-pheasant

VU 21 B1+2c, C1+2a

Malaysia

Polyplectron malacense

Malayan Peacock-pheasant

VU 21 Alc+2c, Cl+2a Malaysia, Myanmar, Thailand

Polyplectron schleiermacheri Bornean Peacock-pheasant

CR 21 A1c, C1

Indonesia, Malaysia

Rheinardia ocellata

Crested Argus

VU 21 Alcd

Laos, Malaysia, Viet Nam

Syrmaticus ellioti

Elliot's Pheasant VU 21 C1+2a

China

Syrmaticus humiae

Hume's Pheasant

VU 21 C1+2a

China, India, Myanmar, Thailand

Syrmaticus reevesii

Reeves's Pheasant

VU 21 A1c, C1+2a

China, Czech Republic [int]

Tragopan blythii

Blyth's Tragopan

VU 21 C1+2a

Bhutan, China, India, Myanmar

Tragopan caboti

Cabot's Tragopan

VU 21 C1+2a

China

Tragopan melanocephalus

Western Tragopan

VU 21 C1+2a

China, India, Nepal?, Pakistan

Xenoperdix udzungwensis

Udzungwa Forest-partridge

EN 21 B1+2e

Tanzania

Order GRUIFORMES

Family MESITORNITHIDAE

Mesitornis unicolor

Brown Mesite

VU 21 A2c, C1+2a

Madagascar

Mesitornis variegata

White-breasted Mesite VU 21 A2c, B1+2ac

Madagascar

Monias benschi

Subdesert Mesite

VU 21 A2c, B1+2ce, C1+2b Madagascar

Family TURNICIDAE

Turnix castanota

Chestnut-backed Buttonquail

VU 21 C2a

Australia

Turnix everetti

Sumba Buttonquail

VU 21 C1+2a, D1 Indonesia

Turnix melanogaster Black-breasted Buttonquail

EN 21 C2a

Australia

Turnix olivii

Buff-breasted Buttonquail

EN 21 C2b

Australia

Turnix worcesteri

Worcester's Buttonquail

VU 21 D1

Philippines

#### Family PEDIONOMIDAE

Pedionomus torquatus
Plains-wanderer
VU <sup>21</sup> B2c+3d
Australia

#### Family GRUIDAE

Grus americana
Whooping Crane
EN <sup>21</sup> D1
Canada. \* Mexico (ex), USA

Grus carunculatus Wattled Crane

VU <sup>21</sup> A2cd, Cl Angola, Botswana, Ethiopia, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zaire, Zambia, Zimbabwe

Grus japonensis
Red-crowned Crane
VU <sup>21</sup> C1+2a
China, Japan, Mongolia

China, Japan, Mongolia, Russia. \* North Korea, South Korea

Grus leucogeranus
Siberian Crane
EN <sup>21</sup> A2cd
China, Mongolia?, Russia. \*
Afghanistan, India, Iran, Pakistan

Grus nigricollis
Black-necked Crane
VU <sup>21</sup> C1
China, India. \* Bhutan, Myanmar,

China, India. \* Bhutan, Myan Viet Nam Grus paradisea

Blue Crane
VU <sup>21</sup> Alac+2c, C1+2a
Botswana, Namibia, South Africa,
Swaziland

Grus vipio
White-naped Crane
VU 21 C1

China, Mongolia, Russia. \* Japan, North Korea, South Korea

#### Family RALLIDAE

Amaurornis olivieri Sakalava Rail CR <sup>21</sup> C2a Madagascar Aramides wolfi

Brown Wood-rail
VU 21 Alc

Colombia, Ecuador, Peru

Aramidopsis plateni Snoring Rail VU <sup>21</sup> C1+2a Indonesia Atlantisia rogersi Inaccessible Rail VU 21 D2

VU 5 DZ

St Helena (Tristan da Cunha)

Coturnicops exquisitus Swinhoe's Rail

> VU <sup>21</sup> C1+2a China, Russia. \* Japan, North Korea, South Korea

Crex crex Comcrake

 $VU^{\ 21}$  Alac

Afghanistan, Albania, Armenia?, Austria, Azerbaijan (ex?), Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey?, Ukraine, United Kingdom, Yugoslavia. \* Algeria, Botswana, Congo, Egypt, Ethiopia, Ghana, Iraq, Israel, Kenya, Malawi, Mali, Mauritania, Morocco, Mozambique, Namibia, Nigeria, Portugal, Saudi Arabia, South Africa, Sudan, Swaziland, Syria, Tanzania, Tunisia, Turkmenistan, Uganda, United Kingdom, Uzbekistan, Yemen, Zaire, Zambia, Zimbabwe

Cyanolimnas cerverai Zapata Rail

CR 21 C2b Cuba

Fulica alai Hawaiian Coot VU <sup>21</sup> D2

USA
Fulica cornuta
Homeo Coot
VU 21 C2a

Argentina, Bolivia, Chile

Gallinula nesiotis Gough Moorhen VU 21 D2

St Helena (Tristan da Cunha)

Gallinula pacifica Samoan Moorhen CR <sup>21</sup> D1 Westem Samoa

Gallinula silvestris
San Cristobal Moorhen
CR <sup>21</sup> C2b
Solomon Islands

Gallirallus lafresnayanus

New Caledonian Rail

New Caledonia (ex?)

Gallirallus okinawae

Okinawa Rail

EN <sup>21</sup> B1+2c, C2b Japan (Nansei-shoto)

Gallirallus sylvestris
Lord Howe Rail
EN 21 D1
Australia

Gymnocrex rosenbergii Bald-faced Rail VU <sup>21</sup> C1+2a

VU 21 C1+2a Indonesia

Habroptila wallacii Invisible Rail VU <sup>21</sup> C1 Indonesia

Laterallus levraudi Rusty-flanked Crake VU <sup>21</sup> A1c+2c, B1+2c, C1+2a Venezuela

Laterallus tuerosi Junin Rail EN 21 B1+2c Peru

Laterallus xenopterus Rufous-faced Crake VU <sup>21</sup> A1c+2c Brazil, Paraguay

Lewinia mirificus
Brown-banded Rail
EN <sup>21</sup> C2b
Philippines

Lewinia muelleri Auckland Islands Rail VU <sup>21</sup> D2 New Zealand

Nesoclopeus woodfordi Woodford's Rail

EN <sup>21</sup> C2a Papua New Guinea, Solomon Islands

Porphyrio mantelli
Takahe
EN <sup>21</sup> D1
New Zealand
Porzana atra

Henderson Crake
VU 21 D2

VU <sup>21</sup> D2 Pitcaim Islands

Porzana spiloptera
Dot-winged Crake
VU 21 A2c, C1+2a
Argentina, Uruguay



Rallina canningi

Andaman Crake VU 21 C1

India

Rallus antarcticus

Austral Rail

CR 21 DI

Argentina, Chile

Rallus semiplumbeus

Bogotá Rail EN 21 B1+2c, C2a

Colombia, Ecuador?

Rallus wetmorei Plain-flanked Rail

EN 21 A2c, C2a

Venezuela

Sarothrura ayresi

White-winged Flufftail

EN 21 B1+2abc+3abc Ethiopia (ex?), South Africa, Zambia, Zimbabwe

Sarothrura watersi

Slender-billed Flufftail

EN 21 BI+2c, C2b

Madagascar

#### Family HELIORNITHIDAE

Heliopais personata

Masked Finfoot

VU 21 C1+2a

Bangladesh, Cambodia?, India, Laos, Myanmar, Thailand?, Viet Nam. \* Cambodia?, Indonesia, Malaysia, Thailand, Viet Nam

## Family RHYNOCHETIDAE

Rhynochetos jubatus

Kagu

EN 21 C2a

New Caledonia

#### Family OTIDIDAE

Ardeotis nigriceps

Great Indian Bustard

EN 21 C2b

India, Pakistan \*

Eupodotis bengalensis

Bengal Florican EN 21 C2a

Bhutan?, Cambodia?, India, Nepal,

Viet Nam

Eupodotis indica

Lesser Florican

CR 21 A1a

India, Nepal. \* Bangladesh?, Nepal, Pakistan

Otis tarda

Great Bustard

VU 21 A2c

Austria, China, Czech Republic, Germany, Hungary, Iran, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Morocco, Portugal, Romania, Russia, Slovakia, Spain, Syria?, Tajikistan, Turkey, Ukraine, Uzbekistan, Yugoslavia. \* Afghanistan?, Azerbaijan, Bulgaria, Iraq, Syria, Turkmenistan,

Yugoslavia

#### Order CHARADRIIFORMES

#### Family HAEMATOPODIDAE

Haematopus chathamensis

Chatham Islands Oystercatcher

EN 21 DI

New Zealand

#### Family RECURVIROSTRIDAE

Himantopus novaezelandiae Black Stilt

CR 21 D1

New Zealand \*

#### Family GLAREOLIDAE

Rhinoptilus bitorquatus

Jerdon's Courser

EN 21 B1+2c, C1+2a

India

#### Family CHARADRIIDAE

Anarhynchus frontalis

Wrybill

VU 21 C2a

New Zealand

#### Charadrius melodus

Piping Plover

VU 21 C2a

Canada, USA. \* Bahamas, Barbados, Bermuda, Cuba, Dominican Republic, Haiti, Jamaica, Mexico, Puerto Rico, Virgin Islands (British),

Virgin Islands (US)

Charadrius montanus

Mountain Plover

VU 21 A1c Canada (ex), USA. \* Mexico

Charadrius obscurus

New Zealand Dotterel

EN 21 C2a

New Zealand

Charadrius rubricollis

Hooded Plover

VU 21 C2a

Australia

Charadrius sanctaehelenae

St Helena Plover

EN 21 CI+2b

St Helena

Charadrius thoracicus

Madagascar Plover

VU 21 B1+2e, C2b

Madagascar

Thinornis novaeseelandiae Shore Plover

EN 21 D1

New Zealand (Chatham Is)

Vanellus gregarius

Sociable Lapwing

VU 21 Alac, C1+2a

Kazakhstan, Russia. \* Egypt, Eritrea,

Ethiopia, India, Iran, Iraq, Israel, Kyrgyzstan, Oman, Pakistan, Saudi

Arabia, Sri Lanka, Sudan, Tajikistan, Turkey, Turkmenistan, Uzbekistan,

Yemen

# Family SCOLOPACIDAE

Coenocorypha pusilla

Chatham Islands Snipe

VU 21 D2

New Zealand

Eurynorhynchus pygmeus Spoon-billed Sandpiper

VU 21 C1+2b

Russia. \* Bangladesh, China, Hong Kong, India, Japan, Malaysia,

Myanmar, North Korea, Singapore, South Korea, Sri Lanka, Taiwan,

Thailand, Viet Nam

Gallinago nemoricola

Wood Snipe

VU 21 C2a

Bhutan, China, India, Nepal. \*

Bangladesh, Laos, Myanmar, Pakistan, Thailand, Viet Nam

Numenius borealis

Eskimo Curlew

CR 21 D1

Canada, USA?. \* Argentina, Brazil,

Chile, French Guiana, Guyana, Paraguay, Suriname, Uruguay

Numenius tahitiensis Bristle-thighed Curlew

VU 21 C2b

USA. \* American Samoa, Cook Islands, Federated States of

Micronesia, Fiji, French Polynesia, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Norfolk Island,

Northern Marianas, Pitcairn Islands, Tokelau, Tonga, Tuvalu, US Minor Pacific Islands, USA (Hawaiian Is),

Western Samoa

Numenius tenuirostris

Slender-billed Curlew

CR 21 C2b

Russia. \* Bulgaria, Greece, Hungary, Italy, Morocco, Romania, Tunisia, Turkey, Ukraine, Yugoslavia

Prosobonia cancellata

Tuamotu Sandpiper

EN 21 C2a

French Polynesia, Kiribati (ex)

Scolopax mira

Amami Woodcock

VU 21 A2e, B1+2ce, C1

Japan

Scolopax rochussenii

Moluccan Woodcock

VU 21 D1+2

1ndonesia

Tringa guttifer

Nordmann's Greenshank

EN 21 C1

Russia. \* Bangladesh, Cambodia?, China, Hong Kong, India, Indonesia, Japan, Laos?, Malaysia, Myanmar, North Korea, Philippines, Singapore, South Korea, Taiwan, Thailand, Viet Nam

## Family LARIDAE

Chlidonias albostriatus

Black-fronted Tern

VU 21 C2a New Zealand

Larus atlanticus

Olrog's Gull

VU 21 A2cd, C1+2b

Argentina. \* Brazil, Uruguay

Larus fuliginosus

Lava Gull

VU 21 D1

Ecuador

Larus leucophthalmus

White-eyed Gull

VU 21 C1

Egypt, Eritrea, Ethiopia, Saudi Arabia, Somalia, Sudan, Yemen. \* Kenya (ex)

Kenya (ex)

Larus saundersi

Saunders's Gull EN 21 A2cde

China. \* Hong Kong, Japan, North Korea?, South Korea?, Taiwan,

Viet Nam

Rissa brevirostris

Red-legged Kittiwake

VU 21 A1a

Russia, USA

Sterna acuticauda

Black-bellied Tern

VU 21 C1

Bangladesh, Cambodia, India, Laos, Myanmar, Nepal, Pakistan, Thailand, Viet Nam

Sterna bernsteini

Chinese Crested-tern

CR 21 D1

China?. \* Indonesia, Malaysia, Philippines, Thailand

Sterna nereis

Fairy Tern

VU 21 C2a

Australia, New Caledonia, New Zealand

Sterna virgata

Kerguelen Tern

VU 21 A2e, C1

France, French Southern and Antarctic Territories (Crozet Is, Kerguelen Is), South Africa

#### Family RHYNCHOPIDAE

Rynchops albicollis

Indian Skimmer

VU 21 C1+2a

Bangladesh, Cambodia, India, Laos, Myanmar, Nepal, Pakistan

#### Family ALCIDAE

Synthliboramphus wumizusume

Japanese Murrelet

VU 21 C1

Japan. \* North Korea, Russia, South Korea

#### Order COLUMBIFORMES

#### Family COLUMBIDAE

Claravis godefrida

Purple-winged Ground-dove

CR 21 C2b

Argentina, Brazil, Paraguay

Columba argentina

Silvery Wood-pigeon

VU 21 C1+2a

Indonesia, Malaysia

Columba bollii

Dark-tailed Laurel Pigeon

VU 21 C2a

Spain (Canary Is)

Columba caribaea

Ring-tailed Pigeon

CR 21 A2cd

Jamaica

#### Columba eversmanni

Pale-backed Pigeon

VU 21 Ala

Afghanistan, China, Kazakhstan, Kyrgyzstan, Tajikistan,

Turkmenistan, Uzbekistan. \* India, Pakistan

Columba inornata

Plain Pigeon

EN 21 C2a

Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico

Columba junoniae

White-tailed Laurel Pigeon

VU 21 C2a

Spain (Canary 1s)

Columba mayeri

Pink Pigeon

CR 21 D1

Mauritius

Columba oenops

Peruvian Pigeon

VU 21 BI+2bc, C2a

Peru

Columba oliviae

Somali Pigeon VU <sup>21</sup> C2a

Somalia

Columba pallidiceps

Yellow-legged Pigeon

CR 21 C2a

Papua New Guinea, Solomon Islands

(ex?)

Columba punicea

Pale-capped Pigeon

VU 21 C1+2a

Bangladesh, China, India, Laos, Myanmar, Thailand, Viet Nam

Columba thomensis

Maroon Pigeon

VU 21 D1

São Tomé & Príncipe (São Tomé)

Columba torringtoni

Sri Lanka Wood-pigeon

VU 21 B1+2c, C1+2a

Sri Lanka

Columbina cyanopis

Blue-eyed Ground-dove

CR 21 C2a

Brazil

Didunculus strigirostris

Tooth-billed Pigeon

VU 21 CI

Western Samoa

Drepanoptila holosericea

Cloven-feathered Dove

VU 21 C2b

New Caledonia



Ducula aurorae Polynesian Imperial-pigeon VU 21 D1+2

French Polynesia

Ducula bakeri

Vanuatu Imperial-pigeon VU 21 C2a Vanuatu

Ducula brenchleyi

Chestnut-bellied Imperial-pigeon

EN 21 A2c Solomon Islands

Ducula carola

Spotted Imperial-pigeon VU 21 A2cd, C1+2a

**Philippines** 

Ducula cineracea

Timor Imperial-pigeon

VU 21 B1+2c, C1+2a

Indonesia

Ducula galeata

Marquesan Imperial-pigeon CR 21 B1+2e, C2b

French Polynesia

Ducula goliath

New Caledonian Imperial-pigeon

VU 21 C2b

New Caledonia

Ducula mindorensis

Mindoro Imperial-pigeon

EN 21 B1+2c, C2a Philippines

Ducula pickeringii

Grey Imperial-pigeon

VU 21 B1+2cde, C1+2a Indonesia, Malaysia, Philippines

Ducula whartoni

Christmas Island Imperial-pigeon

VU 21 D2

Christmas Island

Gallicolumba criniger

Mindanao Bleeding-heart

VU 21 C2a

**Philippines** 

Gallicolumba erythroptera

Polynesian Ground-dove

CR 21 C2a

French Polynesia

Gallicolumba hoedtii

Wetar Ground-dove

VU 21 C1+2a

Indonesia

Gallicolumba keayi

Negros Bleeding-heart

CR 21 B1+2ce, C2a

Philippines

Gallicolumba kubaryi

Caroline Islands Ground-dove EN 21 B1+2e, C2a

Federated States of Micronesia

Gallicolumba menagei

Sulu Bleeding-heart

CR 21 B1+2ce, C2b

Philippines

Gallicolumba platenae

Mindoro Bleeding-heart

CR 21 B1+2c, C2a

**Philippines** 

Gallicolumba rubescens

Marquesan Ground-dove

EN 21 D1

French Polynesia

Gallicolumba salamonis

Thick-billed Ground-dove

CR 21 C2a, D1

Solomon Islands

Gallicolumba sanctaecrucis

Santa Cruz Ground-dove

VU 21 A2c, C1

Solomon Islands, Vanuatu

Geotrygon carrikeri

Veracruz Quail-dove

EN 21 A2c, C1+2a

Mexico

Goura cristata

Western Crowned-pigeon

VU 21 Alacd+2cd, C1+2a

Indonesia

Goura scheepmakeri

Southern Crowned-pigeon

VU 21 Alacd+2cd

Indonesia, Papua New Guinea

Goura victoria

Victoria Crowned-pigeon

VU 21 Alacd+2cd, C1+2a

Indonesia, Papua New Guinea

Leptotila conoveri

Tolima Dove

EN 21 C2a

Colombia

Leptotila ochraceiventris

Ochre-bellied Dove

VU 21 A1c+2c, B1+2cd, C1+2a

Ecuador, Peru

Leptotila wellsi

Grenada Dove

CR 21 A2ce, B1+2ce, C1+2b

Grenada

Phapitreron cinereiceps

Dark-eared Brown-dove

VU 21 A2cd, C1

Philippines

Ptilinopus arcanus

Negros Fruit-dove

CR 21 B1+2ce, C2b, D1

Philippines

Ptilinopus chalcurus

Makatea Fruit-dove

VU 21 D1+2

French Polynesia

Ptilinopus dohertyi

Red-naped Fruit-dove

VU 21 B1+2c, C1

Indonesia

Ptilinopus granulifrons

Carunculated Fruit-dove

VU 21 A2c, B1+2c, C1+2b

Indonesia

Ptilinopus huttoni

Rapa Fruit-dove VU 21 D1+2

French Polynesia

Ptilinopus insularis

Henderson Fruit-dove

VU 21 D2

Pitcaim Islands

Ptilinopus marchei

Flame-breasted Fruit-dove

VU 21 A2cd, B1+2ce, C1+2a

Philippines

Starnoenas cyanocephala

Blue-headed Quail-dove

EN 21 C2a Cuba

Treron psittacea Timor Green-pigeon

VU 21 A1c, C1+2a

Indonesia

Turacoena modesta

Black Cuckoo-dove VU 21 A1c, C1+2a

Indonesia

Order PSITTACIFORMES

Family PSITTACIDAE

Agapornis nigrigenis

Black-cheeked Lovebird

EN 21 C2b

Botswana, Namibia?, Zambia, Zimbabwe (ex?)

Amazona agilis

Black-billed Amazon

VU 21 C2a

Jamaica

Amazona arausiaca

Red-necked Amazon

VU 21 D1+2

Dominica

Amazona barbadensis

Yellow-shouldered Amazon

VU 21 C2a

Aruba (ex?), Netherlands Antilles, Venezuela

Amazona brasiliensis

Red-tailed Amazon

EN 21 A2cd

Brazil

Amazona guildingii

St Vincent Amazon

VU 21 D1+2

St Vincent

Amazona imperialis

Imperial Amazon

VU 21 D1+2

Dominica

Amazona oratrix

Yellow-headed Amazon

EN 21 Alacd

Belize, Guatemala?, Mexico, Puerto

Rico [int]

Amazona pretrei

Red-spectacled Amazon

EN 21 A2cd, C1

Argentina, Brazil, Paraguay?,

Uruguay

Amazona rhodocorytha

Red-browed Amazon

EN 21 C2a

Brazil

Amazona versicolor

St Lucia Amazon

VU 21 D1+2

St Lucia

Amazona vinacea

Vinaceous Amazon

EN 21 Alacd

Argentina, Brazil, Paraguay

Amazona viridigenalis

Green-cheeked Amazon

EN 21 Alacd

Mexico, Puerto Rico [int], USA [int]

Amazona vittata

Puerto Rican Amazon

CR 21 D1

Puerto Rico

Amazona xanthops

Yellow-faced Amazon

**VU** 21 A1c

Bolivia, Brazil

Anodorhynchus hyacinthinus

Hyacinth Macaw

VU 21 A1cd+2cd

Bolivia, Brazil, Paraguay

Anodorhynchus leari

Lear's Macaw CR 21 D1

Brazil

Ara glaucogularis

Blue-throated Macaw

EN 21 C2b

Argentina?, Bolivia, Paraguay?

Ara maracana

Blue-winged Macaw

VU 21 Alac, C1+2a

Argentina, Brazil, Paraguay

Ara militaris

Military Macaw

VU 21 A1c, C2a

Argentina, Bolivia, Colombia, Costa Rica, Ecuador, Honduras,

Mexico, Nicaragua, Panama, Peru, Venezuela

Ara rubrogenys

Red-fronted Macaw

EN 21 C2a

Bolivia

Aratinga auricapilla

Golden-capped Parakeet

VU 21 Alac, C1+2a

Brazil

Aratinga brevipes

Socorro Parakeet

VU 21 D1 Mexico

Aratinga chloroptera

Hispaniolan Parakeet

VU 21 C2a

Dominican Republic, Haiti, Puerto

Rico (ex)

Aratinga euops

Cuban Parakeet

VU 21 A1cd, B1+2c, C1+2a

Cuba

Aratinga guarouba

Golden Parakeet

EN 21 C2b

Brazil

Bolborhynchus ferrugineifrans Rufous-fronted Parakeet

EN 21 C2a

Colombia

Cacatua alba

White Cockatoo VU 21 A2cd

Indonesia

Cacatua haematuropygia

Philippine Cockatoo

CR 21 A1cd

Philippines

Cacatua moluccensis

Salmon-crested Cockatoo VU 21 A1cd+2cd, B1+2ce

Indonesia, Singapore [int]

Cacatua sulphurea

Yellow-crested Cockatoo

EN 21 A1cd+2cd

Hong Kong [int], Indonesia,

Singapore

Calyptorhynchus baudinii

White-tailed Black-cockatoo

VU 21 C2a Australia

Calyptorhynchus lathami

Glossy Black-cockatoo

VU 21 C2a

Australia

Calvotorhynchus latirostris

Slender-billed Black-cockatoo

VU 21 C2a

Australia

Charmosyna amabilis

Red-throated Lorikeet

VU 21 C2a, D1

Fiii

Charmosyna diadema

New Caledonian Lorikeet

EN 21 D1

New Caledonia (ex?) Charmosyna toxopei

Blue-fronted Lorikeet

VU 21 B1+2c, C1+2b, D1 Indonesia

Cyanopsitta spixii

Spix's Macaw

CR 21 D1 Brazil

Cyanoramphus cookii

Norfolk Island Parakeet

CR 21 D1

Norfolk Island

Cyanoramphus unicolor Antipodes Parakeet

 $V\hat{\mathbf{U}}^{21}$  D2

New Zealand

Eos cvanogenia

Black-winged Lory VU 21 A1cd, B1+2c, C1

Indonesia

Eas histria

Red-and-blue Lory

EN 21 A1cd+2cd, B1+2cde, C1

Indonesia

Eunymphicus cornutus

Horned Parakeet

VU 21 C1

New Caledonia

Forpus xanthops Yellow-faced Parrotlet

VU 21 A1ad, B1+2ce, C1+2a

Peru



Geopsittacus occidentalis Night Parrot CR <sup>21</sup> C2a Australia Hapalopsittaca amazonina

Rusty-faced Parrot
EN 21 Cl
Colombia, Ecuador, Venezuela

Hapalopsittaca fuertesi
Fuertes's Parrot
CR <sup>21</sup> D1

CR 21 D1 Colombia

Hapalopsittaca pyrrhops
Red-faced Parrot
EN <sup>21</sup> A2c, C1+2a
Fcuador, Peru

Lathamus discolor Swift Parrot VU <sup>21</sup> B1+2c, C2b Australia

Leptosittaca branickii Golden-plumed Parakeet VU <sup>21</sup> A1c+2c, C1+2a Colombia, Ecuador, Peru

Loriculus catamene Sangihe Hanging-parrot EN <sup>21</sup> B1+2c, C1+2b Indonesia

Loriculus flosculus
Wallace's Hanging-parrot
VU <sup>21</sup> B1+2c, C1+2a
Indonesia

Lorius domicella
Purple-naped Lory
VU <sup>21</sup> B1+2e, C1
Indonesia

Lorius garrulus Chattering Lory VU <sup>21</sup> A2cd Indonesia

Neophema chrysogaster
Orange-bellied Parrot
EN <sup>21</sup> D1

EN 21 D1 Australia \*

Neophema splendida Scarlet-chested Parrot VU <sup>21</sup> B2c+3d Australia

New Zealand Kaka
VU 21 C2a

New Zealand

Ognorhynchus icterotis
Yellow-eared Parrot

CR <sup>21</sup> C2a Colombia, Ecuador

Polytelis alexandrae Alexandra's Parrot VU <sup>21</sup> B2c+3d, C2a Australia

Polytelis swainsonii Superb Parrot VU <sup>21</sup> C2b Australia

Prioniturus luconensis Green Racquet-tail EN <sup>21</sup> Alcd, C2a Philippines

Prioniturus montanus Luzon Racquet-tail VU <sup>21</sup> A2cd, C1+2a Philippines

Prioniturus platenae
Blue-headed Racquet-tail
VU 21 C1+2a
Philippines

Prioniturus verticalis
Blue-winged Racquet-tail
EN <sup>21</sup> C2a
Philippines

Prioniturus waterstradti Mindanao Racquet-tail VU <sup>21</sup> C2a Philippines

Psephotus chrysopterygius Golden-shouldered Parrot EN <sup>21</sup> C2b Australia

Psittacula echo Mauritius Parakeet CR <sup>21</sup> D1

Mauritius

Psittacula intermedia
Intermediate Parakeet

VU 21 D1

Psittaculirostris salvadorii Salvadori's Fig-parrot VU <sup>21</sup> A2cd Indonesia

Psitteuteles iris Iris Lorikeet VU <sup>21</sup> C1+2a Indonesia

Psittrichas fulgidus
Pesquet's Parrot
VU <sup>21</sup> A1d+2cd
Indonesia, Papua New Guinea

Pyrrhura albipectus
White-necked Parakeet
VU 21 C2a

Ecuador

Pyrrhura calliptera
Flame-winged Parakeet
VU <sup>21</sup> Alc+2c, C1+2a
Colombia

Pyrrhura cruentata
Blue-chested Parakeet
VU <sup>21</sup> Alc, B1+2c, C2a
Brazil

Pyrrhura orcesi El Oro Parakeet VU <sup>21</sup> B1+2c, C2a Ecuador

Pyrrhura viridicata
Santa Marta Parakeet
VU <sup>21</sup> C1+2b
Colombia

Rhynchopsitta pachyrhyncha
Thick-billed Parrot
EN 21 A2c, C1+2a
Mexico, USA [int]

Rhynchopsitta terrisi Maroon-fronted Parrot VU <sup>21</sup> B1+2c, C2a Mexico

Tanygnathus gramineus
Black-lored Parrot
VU <sup>21</sup> D2
Indonesia

Tanygnathus lucionensis
Blue-naped Parrot
EN <sup>21</sup> Alcd
Indonesia, Malaysia, Philippines

Touit melanonota
Brown-backed Parrotlet
EN 21 C2a

Brazil

Touit stictoptera

Spot-winged Parrotlet VU <sup>21</sup> C2a Colombia, Ecuador, Peru

Touit surda
Golden-tailed Parrotlet
EN 21 C2a
Brazil

Trichoglossus johnstoniae Mindanao Lorikeet VU <sup>21</sup> C1+2a Philippines

Triclaria malachitacea
Blue-bellied Parrot
EN 21 C2a

Argentina, Brazil

Vini kuhlii

Kuhl's Lorikeet

EN 21 B1+2e, C2a

French Polynesia, Kiribati [int]

Vini peruviana
Blue Lorikeet
VU 21 B1+2d, C2a
Cook Islands, French Polynesia

Vini stepheni
Henderson Lorikeet
VU <sup>21</sup> D2
Pitcairn Islands

Vini ultramarina
Ultramarine Lorikeet
EN <sup>21</sup> B1+2bd
French Polynesia

#### Order CUCULIFORMES

#### Family MUSOPHAGIDAE

Tauraco bannermani Bannerman's Turaco VU <sup>21</sup> A1c, B1+2b, C2b Cameroon

Tauraco ruspolii
Prince Ruspoli's Turaco
EN <sup>21</sup> C2a
Ethiopia

#### Family CUCULIDAE

Carpococcyx radiceus
Sunda Ground-cuckoo
VU <sup>21</sup> C2a
Brunei, Indonesia, Malaysia

Centropus chlororhynchus Green-billed Coucal EN <sup>21</sup> B1+2c Sri Lanka

Centropus nigrorufus Sunda Coucal VU <sup>21</sup> A1c, C1+2a Indonesia

Centropus steerii
Black-hooded Coucal
CR <sup>21</sup> A1c, C1+2a, D1
Philippines

Coccyzus ferrugineus
Cocos Cuckoo
VU <sup>21</sup> D2
Costa Rica

Hyetornis rufigularis Rufous-breasted Cuckoo VU <sup>21</sup> Alacd, C1+2a Dominican Republic, Haiti

Neomorphus radiolosus Banded Ground-cuckoo EN <sup>21</sup> C2a Colombia, Ecuador

Phaenicophaeus pyrrhocephalus Red-faced Malkoha VU <sup>21</sup> A1c, C1+2a Sri Lanka

#### Order STRIGIFORMES

## Family TYTONIDAE

Phodilus prigoginei Congo Bay-owl VU <sup>21</sup> B1+2ac, C2a Burundi?, Zaire

Tyto aurantia
Bismarck Masked-owl
VU <sup>21</sup> C2b
Papua New Guinea

Tyto manusi
Manus Masked-owl
VU <sup>21</sup> D1
Papua New Guinea

Tyto nigrobrunnea
Taliabu Masked-owl
VU <sup>21</sup> C2b, D1
Indonesia

Tyto soumagnei
Madagascar Red Owl
EN <sup>21</sup> C2a
Madagascar (ex?)

## Family STRIGIDAE

Athene blewitti
Forest Owlet
CR <sup>21</sup> D1
India (ex?)

Bubo philippensis
Philippine Eagle-owl
EN <sup>21</sup> C2a
Philippines

Bubo vosseleri Usambara Eagle-owl VU <sup>21</sup> B1+2ac, C2b Tanzania

Glaucidium albertinum Albertine Owlet VU <sup>21</sup> B1+2acd Rwanda, Zaire

Ketupa blakistoni Blakiston's Fish-owl EN <sup>21</sup> C1+2a China, Japan, Russia

Mimizuku gurneyi Lesser Eagle-owl EN <sup>21</sup> C2a Philippines

Nesasio solomonensis
Fearful Owl
VU <sup>21</sup> C2a
Papua New Guinea, Solomon Islands

Ninox rudolfi
Sumba Boobook
VU <sup>21</sup> B1+2c, C1
Indonesia
Ninox strenua
Powerful Owl
VU <sup>21</sup> C2b

Otus angelinae
Javan Scops-owl
VU <sup>21</sup> D1+2
Indonesia

Australia

Otus capnodes
Anjouan Scops-owl
CR <sup>21</sup> C2a
Comoros
Otus fuliginosus
Palawan Scops-owl
VU <sup>21</sup> A1c+2c, C1+2a

Philippines

Otus insularis
Seychelles Scops-owl
CR <sup>21</sup> C2b
Seychelles

Otus ireneae Sokoke Scops-owl VU <sup>21</sup> D2 Kenya, Tanzania? Otus longicornis

Otus longicornis
Luzon Scops-owl
VU <sup>21</sup> C2a
Philippines

Otus mindorensis

Mindoro Scops-owl

VU <sup>21</sup> Alc, B1+2c, C1+2a

Philippines

Otus mirus
Mindanao Scops-owl
VU <sup>21</sup> B1+2c, C1+2a
Philippines

Otus pauliani
Grand Comoro Scops-owl
CR <sup>21</sup> B1+2abc, C2b
Comoros

Otus sagittatus
White-fronted Scops-owl
VU 21 A1c+2c, C1+2a
Indonesia, Malaysia, Myanmar,
Thailand

Scotopelia ussheri
Rufous Fishing-owl
EN <sup>21</sup> C2a
Côte d'Ivoire, Ghana, Guinea,
Liberia, Sierra Leone

Strix davidi Sichuan Wood-owl VU <sup>21</sup> C1+2a China



#### Order CAPRIMULGIFORMES

#### Family AEGOTHELIDAE

Aegotheles savesi New Caledonian Owlet-nightjar EN <sup>21</sup> D1 New Caledonia

#### Family CAPRIMULGIDAE

CR <sup>21</sup> Č2b Bolivia, Brazil, Paraguay? Caprimulgus centralasicus Vaurie's Nightjar VU <sup>21</sup> Dl

Caprimulgus candicans

White-winged Nightjar

Caprimulgus noctitherus Puerto Rican Nightjar CR <sup>21</sup> B1+2c Puerto Rico

China

Caprimulgus prigoginei Itombwe Nightjar VU <sup>21</sup> B1+2ac Zaire

Eurostopodus diabolicus Satanic Eared-nightjar VU <sup>21</sup> D1

Indonesia

Siphonorhis americanus
Jamaican Pauraque
CR <sup>21</sup> D1
Jamaica

#### Order APODIFORMES

#### Family APODIDAE

Apus acuticauda
Dark-rumped Swift
VU <sup>21</sup> D2
India
Collocalia elaphra

Seychelles Swiftlet

VU <sup>21</sup> D1

Seychelles

Collocalia leucophaeus Tahiti Swiftlet VU <sup>21</sup> D1

French Polynesia

Collocalia sawtelli

Atiu Swiftlet
VU 21 D1+2
Cook Islands

Collocalia vulcanorum Volcano Swiftlet VU <sup>21</sup> D1+2 Indonesia Collocalia whiteheadi Whitehead's Swiftlet VU <sup>21</sup> B1+2c, C2a Philippines

Cypseloides lemosi
White-chested Swift
VU <sup>21</sup> C2b
Colombia, Ecuador?

Schoutedenapus schoutedeni Schouteden's Swift VU <sup>21</sup> B1+2ac, C2b Zaire

#### Family TROCHILIDAE

Acestrura berlepschi Esmeraldas Woodstar EN <sup>21</sup> C2b Ecuador

Acestrura bombus
Little Woodstar
EN 21 C2b
Ecuador, Peru

Aglaeactis aliciae
Purple-backed Sunbeam
VU 21 D2
Peru

Amazilia boucardi Mangrove Hummingbird VU <sup>21</sup> B1+2c, C2b Costa Rica

Amazilia castaneiventris
Chestnut-bellied Hummingbird
EN <sup>21</sup> Alc
Colombia

Amazilia distans Táchira Emerald EN <sup>21</sup> A2c Venezuela

Amazilia luciae Honduran Emerald CR <sup>21</sup> A2c Honduras

Campylopterus ensipennis
White-tailed Sabrewing
VU 21 A2c
Trinidad and Tobago, Venezuela

Coeligena prunellei
Black Inca
VU 21 A1c+2c, C1+2a

Colombia

Eriocnemis godini

Turquoise-throated Puffleg

CR <sup>21</sup> B1+2c, C2b, D1

Colombia, Ecuador

Eriocnemis mirabilis
Colourful Puffleg
VU <sup>21</sup> D1+2
Colombia

Eriocnemis nigrivestis
Black-breasted Puffleg
CR <sup>21</sup> A2c, B1+2c
Ecuador

Eulidia yarrellii Chilean Woodstar VU <sup>21</sup> B1+2c, C2b Chile, Peru

Eupherusa cyanophrys Oaxaca Hummingbird EN <sup>21</sup> A2c, B1+2c Mexico

Eupherusa poliocerca
White-tailed Hummingbird
EN <sup>21</sup> A2c
Mexico

Heliangelus regalis Royal Sunangel VU<sup>21</sup> A2c, B1+2c, C1+2a Peru

Heliangelus zusii Bogotá Sunangel CR <sup>21</sup> D1 Colombia

Hylonympha macrocerca Scissor-tailed Hummingbird CR <sup>21</sup> B1+2c Venezuela

Lepidopyga lilliae
Sapphire-bellied Hummingbird
CR <sup>21</sup> C2b, D1
Colombia

Loddigesia mirabilis Marvellous Spatuletail VU <sup>21</sup> B1+2c, C2b Peru

Lophornis brachylopha Short-crested Coquette EN <sup>21</sup> A2c, B1+2c Mexico

Metallura baroni Violet-throated Metaltail VU <sup>21</sup> B1+2c, C2a Ecuador

Ramphodon dohrnii Hook-billed Hermit CR <sup>21</sup> C2a Brazil

Selasphorus ardens
Glow-throated Hummingbird
VU 21 D1+2
Panama

Sephanoides fernandensis Juan Fernández Firecrown CR <sup>21</sup> B1+2c Chile (Juan Fernandez Is) Taphrolesbia griseiventris

Grey-bellied Comet VU 21 D1+2

Peru

Thalurania ridgwayi

Mexican Woodnymph

VU 21 B1+2c

Mexico

## Order TROGONIFORMES

#### Family TROGONIDAE

Euptilotis neoxenus

Eared Quetzal

EN 21 C2b

Mexico, USA

Harpactes wardi

Ward's Trogon

VU 21 C1+2a

Bhutan, China, India, Myanmar,

Viet Nam

#### Order CORACIIFORMES

#### Family ALCEDINIDAE

Actenoides bougainvillei

Moustached Kingfisher

VU 21 C2a

Papua New Guinea, Solomon Islands

Actenoides hombroni

Blue-capped Kingfisher

VU 21 A2c, B1+2c, C1+2a

Philippines

Alcedo argentata

Silvery Kingfisher

EN 21 C2a

Philippines

Alcedo hercules

Blyth's Kingfisher

VU 21 A1c+2c, C1+2a

Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal?, Thailand,

Viet Nam

Ceyx melanurus

Philippine Kingfisher

VU 21 A1c+2c, C1+2a

Philippines

Todirhamphus farquhari

Chestnut-bellied Kingfisher

VU 21 A2c, C1+2a

Todirhamphus gambieri

Tuamotu Kingfisher

VU 21 D1+2

French Polynesia

Todirhamphus godeffroyi

Marquesan Kingfisher

EN 21 B1+2e

French Polynesia

Todirhamphus lazuli

Lazuli Kingfisher

VU 21 B1+2c, C1+2a Indonesia

Todirhamphus ruficollaris

Mangaia Kingfisher

VU 21 D1+2

Cook Islands

Todirhamphus winchelli

Rufous-lored Kingfisher

EN 21 A1c+2c

**Philippines** 

#### Family CORACIIDAE

Atelornis crosslevi

Rufous-headed Ground-roller

VU 21 C2a

Madagascar

Brachypteracias leptosomus Short-legged Ground-roller

VU 21 A2c, C1+2a

Madagascar

Brachypteracias squamigera

Scaly Ground-roller

VU 21 A2c, C1+2a

Madagascar

Uratelornis chimaera

Long-tailed Ground-roller

VU 21 B1+2ce, C2b

Madagascar

#### Family BUCEROTIDAE

Aceros corrugatus

Wrinkled Hornbill

VU 21 A1c+2c, C1+2a

Brunei, Indonesia, Malaysia,

Thailand

Aceros everetti

Sumba Hornbill VU 21 B1+2c, C1

Indonesia

Aceros leucocephalus

Writhed Hornbill

EN 21 A1cd

Philippines

Aceros narcondami

Narcondam Hornbill

VU 21 D1+2 India (Andaman & Nicobar Is)

Aceros nipalensis

Rufous-necked Hornbill

VU 21 A1cd, C1+2a

Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal (ex?),

Thailand, Viet Nam

Aceros subruficallis

Plain-pouched Hornbill

VU 21 C1+2a

India, Indonesia, Myanmar, Thailand

Aceros waldeni

Writhed-billed Hornbill

CR 21 A1c+2c, B1+2ce, C1

**Philippines** 

Anthracoceros montani

Sulu Hornbill

CR 21 A1cd, C1

**Philippines** 

Penelopides mindorensis

Mindoro Hornbill

EN 21 A1c, B1+2c, C1+2a

**Philippines** 

Penelopides panini

Visayan Hornbill

CR 21 A1cd+2cd, B1+2ce, C1+2a

**Philippines** 

#### Order PICIFORMES

# Family GALBULIDAE

Galbula pastazae

Coppery-chested Jacamar

VU 21 C2a

Brazil?, Colombia, Ecuador

Jacamaralcyon tridactyla

Three-toed Jacamar

EN 21 C2a

Brazi1

#### Family CAPITONIDAE

Capito hypoleucus

White-mantled Barbet

EN 21 C2a Colombia

Capito quinticolor

Five-coloured Barbet

VU 21 A1c+2c, C1+2a

Colombia

Pogoniulus makawai White-chested Tinkerbird

VU 21 D1

Zambia

# Family INDICATORIDAE

Melignomon eisentrauti

Yellow-footed Honeyguide

VU 21 A2c

Cameroon, Côte d'Ivoire?, Ghana, Guinea?, Liberia, Sierra Leone

Family PICIDAE

Campephilus imperialis

Imperial Woodpecker

ĈR 21 D1 Mexico

Colaptes fernandinae

Cuban Flicker

EN 21 C2a

Cuba



Dryocopus galeatus
Helmeted Woodpecker
EN <sup>21</sup> C2a
Argentina, Brazil, Paraguay

Picoides borealis
Red-cockaded Woodpecker
VII 21 Algebra R1+2bed C1+2c

VU <sup>21</sup> A1c+2c, B1+2bcd, C1+2a USA

Picumnus fulvescens
Tawny Piculet
VU 21 B1+2c
Brazil

Picumnus limae
Ochraceous Piculet
VU <sup>21</sup> B1+2c
Brazil

Picus rabieri
Red-collared Woodpecker
VU <sup>21</sup> A1c
China, Laos, Viet Nam

Sapheopipo noguchii Okinawa Woodpecker CR <sup>21</sup> B1+2c, C2b Japan (Nansei-shoto)

#### Order PASSERIFORMES

#### Family EURYLAIMIDAE

Eurylaimus steerii Wattled Broadbill VU <sup>21</sup> A1c+2c, C1+2a Philippines

Pseudocalyptomena graueri African Green Broadbill VU <sup>21</sup> B1+2ac Uganda, Zaire

## Family DENDROCOLAPTIDAE

Xiphocolaptes falcirostris Moustached Woodcreeper VU <sup>21</sup> B1+2c, C2a Brazil

## Family FURNARIIDAE

Aphrastura masafuerae Más Afuera Rayadito VU <sup>21</sup> D1+2 Chile (Juan Fernandez Is)

Asthenes anthoides
Austral Canastero
VU <sup>21</sup> C2a
Argentina, Chile

Asthenes berlepschi
Berlepsch's Canastero
VU 21 D1+2
Bolivia

Asthenes heterura Maquis Canastero VU <sup>21</sup> Alc, C1+2a Bolivia

Asthenes huancavelicae Pale-tailed Canastero VU <sup>21</sup> C1 Peru

Asthenes luizae Cipó Canastero EN <sup>21</sup> C1+2b Brazil

Asthenes steinbachi Chestnut Canastero VU <sup>21</sup> A1c, C2a Argentina

Cinclodes aricomae Royal Cinclodes CR <sup>21</sup> C2a Bolivia, Peru

Cinclodes palliatus
White-bellied Cinclodes
VU <sup>21</sup> D1
Peru

Hylocryptus erythrocephalus Henna-hooded Foliage-gleaner VU <sup>21</sup> Alc+2c, Cl+2a Ecuador, Peru

Leptasthenura xenothorax White-browed Tit-spinetail CR <sup>21</sup> C2a Peru

Megaxenops parnaguae Great Xenops VU <sup>21</sup> Alc+2c, Cl+2a Brazil

Philydor novaesi
Alagoas Foliage-gleaner
CR <sup>21</sup> B1+2c
Brazil

Premnoplex tatei
White-throated Barbtail
EN <sup>21</sup> B1+2c, C2a
Venezuela

Simoxenops striatus
Bolivian Recurvebill
VU 21 A2c, B1+2bc, C1+2a
Bolivia

Synallaxis courseni
Apurímac Spinetail
VU <sup>21</sup> D1+2
Peru

Synallaxis hellmayri
Red-shouldered Spinetail
VU <sup>21</sup> C2a
Brazil

Synallaxis infuscata
Plain Spinetail
EN 21 B1+2c, C1
Brazil

 $\begin{array}{c} \textit{Synallaxis kollari} \\ \textit{Hoary-throated Spinetail} \\ \textit{VU} \quad ^{21} \quad \textit{D2} \\ \textit{Brazil, Guyana} \end{array}$ 

Synallaxis tithys
Blackish-headed Spinetail
VU <sup>21</sup> A1c+2c, B1+2c, C1+2a
Ecuador, Peru

Synallaxis zimmeri Russet-bellied Spinetail EN <sup>21</sup> B1+2c, C2b Peru

Syndactyla ruficollis Rufous-necked Foliage-gleaner VU <sup>21</sup> Alc+2c, Cl+2a Ecuador, Peru

Thripophaga cherriei Orinoco Softtail VU <sup>21</sup> D2 Venezuela

Thripophaga macroura
Striated Softtail
VU <sup>21</sup> C1+2a
Brazil

#### Family FORMICARIIDAE

Biatas nigropectus
White-bearded Antshrike
VU 21 C2a
Argentina, Brazil
Cercomacra carbonaria

Cercomacra carbonaria Rio Branco Antbird VU <sup>21</sup> D2 Brazil, Guyana

Clytoctantes alixii
Recurve-billed Bushbird
EN <sup>21</sup> C1+2a
Colombia, Venezuela

Dysithamnus occidentalis
Bicoloured Antvireo
VU <sup>21</sup> C1+2a
Colombia, Ecuador

Dysithamnus plumbeus
Plumbeous Antvireo
VU <sup>21</sup> Alc+2c, Bl+2c, Cl+2a
Brazil

Formicarius rufifrons
Rufous-fronted Antthrush
VU <sup>21</sup> A2c, C1+2b

Formicivora erythronotos Black-hooded Antwren CR <sup>21</sup> A2c, C1+2a, D1 Brazil Formicivora iheringi Narrow-billed Antwren VU <sup>21</sup> B1+2c, C1+2a

Brazil

Formicivora littoralis
Restinga Antwren
EN <sup>21</sup> A2c, B1+2bc, C1+2a
Brazil

Grallaria alleni Moustached Antpitta EN <sup>21</sup> B1+2c, C2a Colombia

Grallaria chthonia Táchira Antpitta VU <sup>21</sup> D1+2 Venezuela

Grallaria gigantea
Giant Antpitta
VU <sup>21</sup> A1c+2c, C1+2a
Colombia, Ecuador

Grallaria kaestneri Cundinamarca Antpitta VU <sup>21</sup> D2 Colombia

Grallaria milleri Brown-banded Antpitta EN <sup>21</sup> B1+2c Colombia

Grallaria rufocinerea Bicoloured Antpitta EN <sup>21</sup> C2a Colombia

Grallaricula cucullata
Hooded Antpitta
VU <sup>21</sup> A1c+2c, C1+2a
Colombia, Venezuela

Herpsilochmus parkeri Ash-throated Antwren VU <sup>21</sup> D2 Peru

Herpsilochmus pectoralis
Pectoral Antwren
VU 21 A2c, B1+2c, C1+2a
Brazil

Myrmeciza griseiceps
Grey-headed Antbird
EN <sup>21</sup> A2c
Ecuador, Peru

Myrmeciza ruficauda Scalloped Antbird VU <sup>21</sup> A1c+2c, B1+2c, C1+2a Brazil

Myrmoborus melanurus
Black-tailed Antbird
VU <sup>21</sup> C2b
Peru

Myrmotherula fluminensis Rio de Janeiro Antwren VU <sup>21</sup> A1c+2c, B1+2c, C1+2a Brazil

Myrmotherula grisea
Ashy Antwren
VU <sup>21</sup> A1c+2c, C1+2a
Bolivia

Myrmotherula minor Salvadori's Antwren VU <sup>21</sup> B1+2c, C2a Brazil

Myrmotherula snowi Alagoas Antwren CR <sup>21</sup> B1+2c Brazil

Myrmotherula unicolor Unicoloured Antwren VU <sup>21</sup> B1+2c, C2a Brazil

Myrmotherula urosticta Band-tailed Antwren VU <sup>21</sup> B1+2c, C2a Brazil

Pyriglena atra
Fringe-backed Fire-eye
EN <sup>21</sup> A1c+2c, B1+2c, C1+2b
Brazil

Rhopornis ardesiaca
Slender Antbird
EN <sup>21</sup> A2c, B1+2c
Brazil

Terenura sharpei
Yellow-rumped Antwren
VU <sup>21</sup> Alc+2c, Cl+2a
Bolivia. Peru

Terenura sicki
Orange-bellied Antwren
VU <sup>21</sup> A1c+2c, B1+2c, C1+2a
Brazil

Xenornis setifrons Speckled Antshrike VU <sup>21</sup> C2a Colombia, Panama

Family RHINOCRYPTIDAE

Merulaxis stresemanni Stresemann's Bristlefront CR <sup>21</sup> C2a Brazil

Scytalopus novacapitalis Brasília Tapaculo VU <sup>21</sup> A1c+2c Brazil

Scytalopus psychopompus Bahia Tapaculo EN <sup>21</sup> B1+2c, C1+2a Brazil Family COTINGIDAE

Calyptura cristata Kinglet Calyptura CR <sup>21</sup> C2a, D1 Brazil

Carpodectes antoniae Yellow-billed Cotinga VU <sup>21</sup> A1c+2c, C1+2a Costa Rica, Panama

Carpornis melanocephalus
Black-headed Berryeater
VU <sup>21</sup> C1+2a
Brazil

Cephalopterus glabricollis Bare-necked Umbrellabird VU <sup>21</sup> A1c+2c, C1+2a Costa Rica, Panama

Cephalopterus penduliger Long-wattled Umbrellabird VU <sup>21</sup> C2a Colombia, Ecuador

Cotinga maculata
Banded Cotinga
EN <sup>21</sup> B1+2c, C1
Brazil

Catinga ridgwayi
Turquoise Cotinga
VU <sup>21</sup> C2b
Costa Rica, Panama

Doliornis remseni
Chestnut-bellied Cotinga
VU <sup>21</sup> A1c+2c, B1+2c, C1+2a
Colombia, Ecuador, Peru

Iodopleura pipra
Buff-throated Purpletuft
VU <sup>21</sup> A1c+2c, C1+2a
Brazil

Laniisoma elegans Shrike-like Cotinga VU <sup>21</sup> A1c+2c, C1+2a Brazil

Lipaugus lanioides
Cinnamon-vented Piha
VU <sup>21</sup> A1c+2c, C1+2a
Brazil

Procnias tricarunculata
Three-wattled Bellbird
VU <sup>21</sup> Alc+2c
Costa Rica, Honduras, Nicaragua,
Panama

Tijuca condita
Grey-winged Cotinga
VU <sup>21</sup> D1+2
Brazil

Xipholena atropurpurea
White-winged Cotinga
VU 21 A1c+2c, B1+2c, C1+2a
Brazil



Zaratornis stresemanni White-cheeked Cotinga VU <sup>21</sup> B1+2c, C2a Peru

# Family PIPRIDAE

Pipra vilasboasi Golden-crowned Manakin VU <sup>21</sup> C2b Brazil

Piprites pileatus
Black-capped Manakin
VU <sup>21</sup> B1+2c, C1+2a
Argentina, Brazil

## Family TYRANNIDAE

Agriornis andicola
White-tailed Shrike-tyrant
VU <sup>21</sup> A1a, C2a
Argentina, Bolivia, Chile, Ecuador,
Peru

Alectrurus risora
Strange-tailed Tyrant
VU <sup>21</sup> Alac+2c, Cl+2a
Argentina, Brazil (ex?), Paraguay,
Uruguay (ex?)

Anairetes alpinus
Ash-breasted Tit-tyrant
EN <sup>21</sup> B1+2c, C2a
Bolivia, Peru
Attila torridus

Ochraceous Attila

VU <sup>21</sup> A1c+2c, B1+2c, C1+2a
Colombia, Ecuador, Peru

Euscarthmus rufomarginatus Rufons-sided Pygmy-tyrant VU <sup>21</sup> A1c+2c Bolivia, Brazil, Paraguay, Suriname

Hemitriccus furcatus
Fork-tailed Pygmy-tyrant
VU <sup>21</sup> C2a
Brazil

Hemitriccus kaempferi Kaempfer's Tody-tyrant EN <sup>21</sup> C1 Brazil

Hemitriccus mirandae
Buff-breasted Tody-tyrant
VU <sup>21</sup> A1c+2c, B1+2c, C1
Brazil

Heteroxolmis dominicana
Black-and-white Monjita
VU 21 A1c+2c
Argentina, Brazil, Paraguay, Uruguay

Lathrotriccus griseipectus
Grey-breasted Flycatcher
VU 21 A1c+2c, B1+2c, C1+2a
Ecuador, Peru

Myiotheretes pernix
Santa Marta Bush-tyrant
VU <sup>21</sup> C2b
Colombia

Nesotriccus ridgwayi Cocos Flycatcher VU <sup>21</sup> D2 Costa Rica

Onychorhynchus occidentalis
Pacific Royal Flycatcher
VU <sup>21</sup> C2a
Ecuador, Peru

Onychorhynchus swainsoni Atlantic Royal Flycatcher EN 21 C2a Brazil

Phylloscartes ceciliae Alagoas Tyrannulet EN <sup>21</sup> B1+2c, C1 Brazil

Phylloscartes kronei
Restinga Tyrannulet
VU <sup>21</sup> A1c+2c, C1+2a
Brazil

Phylloscartes lanyoni Antioquia Bristle-tyrant EN <sup>21</sup> A1c+2c Colombia

Phylloscartes paulistus
São Paulo Tyrannulet
VU 21 A1c+2c, C1+2a
Argentina?, Brazil, Paraguay

Phylloscartes roquettei Minas Gerais Tyrannulet EN <sup>21</sup> B1+2c Brazil

Platyrinchus leucoryphus Russet-winged Spadebill VU <sup>21</sup> A1c+2c, B1+2c, C1+2a Argentina?, Brazil, Paraguay

Pseudocolopteryx dinellianus Dinelli's Doradito VU <sup>21</sup> C1+2a Argentina, Bolivia, Paraguay

Tyrannus cubensis
Giant Kingbird
EN <sup>21</sup> C2a
Bahamas (ex), Cuba, Turks and
Caicos Islands

#### Family PHYTOTOMIDAE

Phytotoma raimondii Peruvian Plantcutter CR <sup>21</sup> A2c Peru

# Family PITTIDAE

Pitta anerythra
Black-faced Pitta
VU <sup>21</sup> C2a
Papua New Guinea, Solomon Islands

Pitta gurneyi
Gurney's Pitta
CR <sup>21</sup> A1c, B1+2c, C1
Myanmar (ex?), Thailand

Pitta kochi
Whiskered Pitta
VU 21 B1+2ce, C1+2a
Philippines

Pitta nympha
Fairy Pitta
VU <sup>21</sup> C1+2a
China, Japan, South Korea, Taiwan.
\* Brunei, Indonesia, Malaysia,
Viet Nam

Pitta schneideri Schneider's Pitta VU <sup>21</sup> C1+2a Indonesia

Pitta steerii
Azure-breasted Pitta
VU <sup>21</sup> A1c+2c, C1+2a
Philippines

Pitta superba Superb Pitta VU <sup>21</sup> D1 Papua New Guinea

### Family PHILEPITTIDAE

Neodrepanis hypoxanthus Yellow-bellied Asity EN <sup>21</sup> C2a Madagascar

#### Family ATRICHORNITHIDAE

Atrichornis clamosus
Noisy Scrub-bird
VU <sup>21</sup> D1+2
Australia

Atrichornis rufescens Rufous Scrub-bird VU <sup>21</sup> B1+2c, C2a Australia

# Family ALAUDIDAE

Alauda razae
Raso Lark
EN <sup>21</sup> D1
Cape Verde
Certhilauda burra

Red Lark
VU <sup>21</sup> B1+2c, C2b
Namibia, South Africa

Heteromirafra archeri

Archer's Lark

EN 21 B1+2ac, C2a

Somalia

Heteromirafra ruddi

Rudd's Lark

CR 21 A2c

Lesotho, South Africa, Swaziland

Heteromirafra sidamoensis

Sidamo Lark

EN 21 B1+2ac, C2b

Ethiopia

Mirafra ashi

Ash's Lark

EN 21 B1+2ac, C2b

Somalia

Mirafra degodiensis

Degodi Lark

VU 21 D1+2

Ethiopia

Spizocorys fringillaris

Botha's Lark

VU 21 A2c, C1+2b

South Africa

#### Family HIRUNDINIDAE

Hirundo atrocaerulea

Blue Swallow

VU 21 A1c+2c, C1+2a

Malawi, Mozambique, South Africa,

Swaziland, Tanzania, Zambia,

Zimbabwe. \* Kenya, Uganda, Zaire

Hirundo megaensis

White-tailed Swallow

VU 21 B1+2abc, C2b

Ethiopia

Hirundo perdita

Red Sea Swallow

VU 21 D1

Sudan?

Pseudochelidon sirintarae

White-eyed River-martin

CR 21 D1

Thailand

#### Family MOTACILLIDAE

Anthus chloris

Yellow-breasted Pipit

VU 21 B1+2c

Lesotho, South Africa

Anthus nattereri

Ochre-breasted Pipit

EN 21 C2a

Argentina, Brazil, Paraguay

Anthus sokokensis

Sokoke Pipit

VU 21 B1+2abc, C2a

Kenya, Tanzania (ex?)

## Family CAMPEPHAGIDAE

Campephaga lobata

Western Wattled Cuckoo-shrike

VU 21 A1c+2c

Côte d'Ivoire, Ghana, Guinea,

Liberia, Sierra Leone

Coracina fortis

Buru Cuckoo-shrike

VU 21 B1+2c, C1+2b

Indonesia

Coracina mcgregori

McGregor's Cuckoo-shrike

VU 21 B1+2c, C1+2a

**Philippines** 

Coracina mindanensis

Black-bibbed Cicadabird

VU 21 C1+2a

**Philippines** 

Coracina newtoni

Réunion Cuckoo-shrike

EN 21 D1

Réunion

Coracina ostenta

White-winged Cuckoo-shrike

VU 21 A2c, B1+2c

Philippines

Coracina typica

Mauritius Cuckoo-shrike

VU 21 D1

Mauritius

#### Family PYCNONOTIDAE

Bleda eximia

Green-tailed Bristlebill

VU 21 A1c+2c

Côte d'Ivoire, Ghana, Guinea,

Liberia, Sierra Leone

Chlorocichla prigoginei

Prigogine's Greenbul

VU 21 B1+2abcde, C2a

Zaire

Criniger olivaceus

Yellow-throated Olive Greenbul

VU 21 A1c+2c

Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Senegal, Sierra Leone

Hypsipetes nicobariensis

Nicobar Bulbul

VU 21 A1e, B1+2e, C1+2a

India

Hypsipetes olivaceus

Mauritius Bulbul

VU 21 D1

Mauritius

Ixos siquijorensis Streak-breasted Bulbul

EN 21 B1+2c

Philippines

Phyllastrephus apperti Appert's Greenbul

VU 21 B1+2abcd, C1+2a, D1

Madagascar

Phyllastrephus cinereiceps

Grey-crowned Greenbul

VU 21 B1+2c, C2a Madagascar

Phyllastrephus leucolepis

Liberian Greenbul

CR 21 A2c, C1+2b

Liberia

Phyllastrephus tenebrosus

Dusky Greenbul

EN 21 C2a

Madagascar

Pycnonotus tympanistrigus

Spot-necked Bulbul

VU 21 C1+2a Indonesia

Pycnonotus zeylanicus

Straw-headed Bulbul

VU 21 A1cd

Brunei, Indonesia, Malaysia,

Myanmar, Thailand

Family IRENIDAE

Chloropsis flavipennis Philippine Leafbird

EN 21 C1

Philippines

Family LANIIDAE

Laniarius amboimensis

Gabela Bush-shrike

EN 21 B1+2c, C1 Angola

Laniarius brauni Orange-breasted Bush-shrike

EN 21 B1+2c

Angola

Laniarius liberatus Bulo Burti Bush-shrike

CR 21 D1

Somalia

Lanius newtoni

São Tomé Fiscal Shrike

CR 21 D1

São Tomé & Príncipe (São Tomé

(ex?))

Malaconotus alius Uluguru Bush-shrike

CR 21 C2b

Tanzania

Malaconotus gladiator

Green-breasted Bush-shrike VU 21 C2a

Cameroon, Nigeria?



Malaconotus monteiri Monteiro's Bush-shrike

EN 21 C2a

Angola, Cameroon (ex?), Kenya

Prionops alberti

Yellow-crested Helmet-shrike

VU 21 C1+2a

Zaire

Prionops gabela

Gabela Helmet-shrike

EN 21 B1+2bcd, C2a

Angola

Prionops poliolophus

Grey-crested Helmet-shrike

VU 21 C2b

Kenya, Tanzania

Telophorus kupeensis

Mount Kupe Bush-shrike

CR 21 D1

Cameroon

#### Family VANGIDAE

Oriolia bernieri

Bernier's Vanga

VU 21 C2a Madagascar

Xenopirostris damii

Van Dam's Vanga

VU 21 D2

Madagascar

Xenopirostris polleni

Pollen's Vanga

VU 21 C2a

Madagascar

#### Family CINCLIDAE

Cinclus schulzi

Rufous-throated Dipper

VU 21 C2a

Argentina, Bolivia

#### Family TROGLODYTIDAE

Cistothorus apolinari

Apolinar's Wren

EN 21 C1+2a

Colombia

Ferminia cerverai

Zapata Wren

CR 21 C2b

Cuba

Hylorchilus navai

Nava's Wren

VU 21 A1c+2c, B1+2c, C1+2a

Mexico

Hylorchilus sumichrasti

Sumichrast's Wren

VU 21 A1c+2c, B1+2c, C1+2a

Mexico

Thrvothorus nicefori

Niceforo's Wren

CR 21 B1+2c

Colombia

Troglodytes cobbi

Cobb's Wren

VU 21 D2

Falkland Islands

Troglodytes tanneri

Clarión Wren

VU 21 D1+2

Mexico

#### Family MIMIDAE

Mimodes graysoni Socorro Mockingbird

EN 21 B1+2e, C2b

Mexico

Nesomimus trifasciatus

Floreana Mockingbird

EN 21 D1

Ecuador (Galápagos 1s)

Ramphocinclus brachyurus

White-breasted Thrasher

EN 21 B1+2e, C1+2a, D1

Martinique, St Lucia

#### Family MUSCICAPIDAE

Acanthiza iredalei

Slender-billed Thornbill

VIJ 21 C2a

Australia

Acrocephalus brevipennis

Cape Verde Warbler

VU 21 A1ac, B1+2bc, C2b, D1

Cape Verde

Acrocephalus caffer

Tahiti Reed-warbler

VU 21 D1

French Polynesia

Acrocephalus familiaris

Millerbird

VU 21 D1+2

USA (Hawaiian Is)

Acrocephalus luscinia

Nightingale Reed-warbler

VU 21 A2e, B1+2cde, C1

Guam (ex), Northern Marianas

Acrocephalus paludicola

Aquatic Warbler

VU 21 A2c

Austria, Belarus, Germany, Hungary, Latvia, Lithuania, Moldova, Poland,

Russia, Ukraine. \* Belgium, Bulgaria, Czech Republic, France,

Iran, Italy, Latvia, Mali, Mauritania, Morocco, Netherlands, Portugal,

Senegal, Spain, Switzerland, United Kingdom

49

Acrocephalus rehsei

Nauru Reed-warbler

VU 21 D2

Nauru

Acrocephalus sorghophilus

Streaked Reed-warbler

VU 21 B1+2c, C1+2a

China. \* Philippines

Acrocephalus vaughani

Pitcairn Reed-warbler

VU 21 D2

French Polynesia, Pitcairn Islands

Alcippe variegaticeps

Gold-fronted Fulvetta

VU 21 B1+2c, C1+2a

China

Alethe choloensis

Thyolo Alethe

VU 21 B1+2c

Malawi, Mozambique

Amaurocichla bocagii

São Tomé Short-tail

VU 21 D1

São Tomé & Príncipe (São Tomé)

Amytornis dorotheae

Carpentarian Grasswren VU 21 B1+2c, C2a

Australia

Amytornis textilis

Thick-billed Grasswren

VU 21 C2a

Australia

Apalis argentea

Kungwe Apalis VU 21 B1+2ace

Burundi, Rwanda, Tanzania, Zaire

Apalis bamendae

Bamenda Apalis

VU 21 B1+2acd

Cameroon Apalis chariessa

White-winged Apalis

VU 21 B1+2bc

Kenya (ex?), Malawi, Mozambique,

Tanzania

Apalis fuscigularis

Taita Apalis Kenya

CR 21 B1+2bc

Apalis karamojae

Karamoja Apalis

VU 21 A2c, B1+2c Tanzania, Uganda

Apalis lynesi

Namuli Apalis VU 21 D2

Mozambique

Aphelocephala pectoralis Chestnut-breasted Whiteface VU <sup>21</sup> C2a

Australia

Arcanator orostruthus
Dappled Mountain-robin
VU <sup>21</sup> B1+2bc

Mozambique, Tanzania

Bathmocercus cerviniventris Black-capped Rufous Warbler

VU <sup>21</sup> C2a Côte d'Ivoire

Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone

Bebrornis rodericanus

Rodrigues Warbler

CR 21 DI

Mauritius (Rodrigues)

Bebroruis sechellensis Seychelles Warbler

VU <sup>21</sup> D1+2 Seychelles

Brachypteryx hyperythra

Rusty-bellied Shortwing VU 21 C1+2a

China, India

Bradypterus graueri

Grauer's Swamp-warbler

VU 21 B1+2ac

Burundi, Rwanda, Uganda, Zaire

Bradypterus major

Long-billed Bush-warbler

VU 21 C2a

China, India, Pakistan Chaetornis striatus

Bristled Grass-warbler

VU <sup>21</sup> A1c, C1+2a Bangladesh, India, Nepal, Pakistan

Chloropeta gracilirostris

Papyrus Yellow Warbler VU <sup>21</sup> B1+2abcd

Burundi, Kenya, Rwanda, Tanzania, Uganda, Zaire, Zambia

Chrysomma altirostre

Jerdon's Babbler

VU 21 A1c

India, Myanmar (ex?), Nepal, Pakistan

Cisticola haesitatus

Socotra Cisticola

VU 21 D1

Yemen (Socotra)

Cochoa azurea

Javan Cochoa

VU 21 B1+2c

Indonesia

Cochoa beccarii

Sumatran Cochoa VU <sup>21</sup> C1+2a

Indonesia

Copsychus cebuensis

Black Shama

EN 21 C2a Philippines

Copsychus sechellarum

Seychelles Magpie-robin

CR 21 D1 Seychelles

Cossypha heinrichi

White-headed Robin-chat

VU 21 B1+2ac

Angola, Zaire

Crocias langbianis

Grey-crowned Crocias

CR 21 B1+2c

Viet Nam

Crossleyia xanthophrys Madagascar Yellowbrow

VU 21 C2a

Madagascar

Cyornis ruckii

Rueck's Blue-flycatcher

VU 21 C1, D1

Indonesia, Malaysia?

Cyornis sanfordi

Matinan Flycatcher

VU 21 D2

Indonesia

Dasyornis brachypterus

Eastern Bristlebird

VU <sup>21</sup> B1+2c, C2a Australia

Dasyornis broadbenti Rufous Bristlebird

VU <sup>21</sup> B1+2c, C2a Australia

Dasyornis longirostris

Western Bristlebird

EN <sup>21</sup> B1+2cd, C2a Australia

Eremomela turneri

Turner's Eremomela

VU 21 B1+2ac

Kenya, Uganda, Zaire

Eutrichomyias rowleyi

Cerulean Paradise-flycatcher

CR <sup>21</sup> B1+2ce, C2b, D1 Indonesia

Hiddiesia

Ficedula basilanica

Little Slaty Flycatcher

VU 21 A1c+2c, C1+2a

Philippines

Ficedula bonthaina

Lompobattang Flycatcher EN <sup>21</sup> B1+2c

Indonesia

Ficedula crypta

Cryptic Flycatcher

VU 21 A2c, B1+2c, C1+2a

Philippines

Ficedula disposita

Furtive Flycatcher

EN <sup>21</sup> C2a Philippines

Ficedula henrici

Damar Flycatcher

VU 21 D2

Indonesia

Ficedula platenae

Palawan Flycatcher

EN 21 C2a

Philippines

Ficedula subrubra

Kashmir Flycatcher

VU 21 B1+2c

India, Pakistan. \* India, Nepal, Sri Lanka

Garrulax bieti

White-speckled Laughingthrush

VU 21 B1+2c, C1+2a

China

Garrulax cinereifrons

Ashy-headed Laughingthrush VU <sup>21</sup> B1+2c, C1+2a

Sri Lanka

Garrulax milleti

Black-hooded Laughingthrush VU <sup>21</sup> A2c, B1+2c, C1+2a

Viet Nam

Garrulax sukatschewi

Snowy-cheeked Laughingthrush

VU 21 C1+2a China

Garrulax yersini

Collared Laughingthrush

VU <sup>21</sup> B1+2c, C1+2a Viet Nam

Gerygone hypoxantha

Biak Gerygone

EN 21 B1+2c, C2b

Indonesia

Gerygone modesta

Norfolk Island Gerygone

VU 21 D2

Norfolk Island

Humblotia flavirostris

Grand Comoro Flycatcher
VU <sup>21</sup> B1+2c, C2b

Comoros

Hypothymis coelestis

Celestial Monarch EN 21 C2a

Philippines



Jabouilleia danjoui Short-tailed Scimitar-babbler VU 21 A1c+2c, C1+2a

Laos, Viet Nam

Kupeornis gilberti White-throated Mountain-babbler

VU 21 B1+2bc Cameroon, Nigeria

Lamprolia victoriae

Silktail

VU 21 B1+2c Fiji

Liocichla omeiensis Omei Shan Liocichla VU 21 BI+2c, C1

China

Luscinia obscura

Black-throated Blue Robin

VU 21 C1+2a China. \* Thailand

Luscinia ruficeps Rufous-headed Robin

VU 21 C1+2a China. \* Malaysia

Macrosphenus pulitzeri Pulitzer's Longbill EN 21 B1+2bc, C2a

Angola Malacocincla perspicillata Black-browed Babbler

VU 21 C1. D1 Indonesia

Malacocincla vanderbilti Vanderbilt's Babbler

VU 21 C1, D1 Indonesia

Malacopteron palawanense Melodious Babbler

EN 21 C2a **Philippines** 

Mayrornis versicolor

Ogea Monarch VU 21 D2 Fiji

Megalurus albolimbatus

Fly River Grassbird VU 21 C2a, D2

China, Japan, Mongolia?, Papua New Guinea

Megalurus pryeri

Marsh Grassbird VU 21 C1+2a

China, Japan, Mongolia?

Melaenornis annamarulae Nimba Flycatcher

VU 21 Alc+2c

Côte d'Ivoire, Guinea, Liberia, Sierra Leone

Metabolus rugensis

Truk Monarch

EN 21 Ala, B1+2acd, C2a Federated States of Micronesia

Micromacronus leytensis Miniature Tit-babbler

VU 21 A1c+2c, C1+2a Philippines

Mohoua ochrocephala

Yellowhead

VU 21 B2bde+3c, C2a New Zealand

Monarcha boanensis

Black-chinned Monarch EN 21 B1+2c, DI

Indonesia

Monarcha brehmii

Biak Monarch

EN 21 B1+2c, C2b Indonesia

Monarcha everetti White-tipped Monarch

VU 21 C2b, D2 Indonesia

Monarcha sacerdotum

Flores Monarch EN 21 C2b

Indonesia

Monarcha takatsukasae

Tinian Monarch VU 21 D2 Northern Marianas

Muscicapa lendu

Chapin's Flycatcher VU 21 B1+2ac, C2a Kenya, Uganda, Zaire

Muscicapa randi

Ashy-breasted Flycatcher EN 21 C2a

**Philippines** 

Myadestes lanaiensis Olomao

CR 21 A1a, B1+2e, C2b, D1 USA (Hawaiian Is)

Myadestes myadestinus Kamao

CR 21 A1a, B1+2e, C2b, D1 USA (Hawaiian Is)

Myadestes palmeri Puaiohi

CR 21 A1a, B1+2ce, C2a, D1 USA (Hawaiian Is)

Myiagra albiventris Samoan Flycatcher

VU 21 Alac Western Samoa Myiophonus blighi

Sri Lanka Whistling-thrush EN 21 B1+2c, C1

Sri Lanka

Napothera rabori

Rabor's Wren-babbler

VU 21 C1+2a Philippines

Newtonia fanovanae Red-tailed Newtonia

VU 21 B1+2c, C2a

Madagascar

Orthotomus moreaui Long-billed Tailorbird

CR 21 C2a

Mozambique, Tanzania

Paradoxornis davidianus

Short-tailed Parrotbill

VU 21 A1c, C1+2a

China, Laos, Myanmar, Thailand, Viet Nam

Paradoxornis flavirostris

Black-breasted Parrotbill

VU 21 A1ac, C1+2a

Bangladesh, India, Myanmar, Nepal (ex?)

Paradoxornis przewalskii Rusty-throated Parrotbill

VU 21 BI+2c, CI+2a China

Paradoxornis zappeyi Grey-hooded Parrotbill

VU 21 B1+2c, C1+2a China

Pellorneum palustre Marsh Babbler

VU 21 Alc, CI+2a Bangladesh, India

Petroica traversi

Chatham Islands Robin

EN 21 D1

New Zealand [re-int] (Chatham Is)

Phylloscopus amoenus Sombre Leaf-warbler

VU 21 D1+2 Solomon Islands

Phylloscopus hainanus Hainan Leaf-warbler

VU 21 A1c, B1+2c China

Phylloscopus ijimae Ijima's Leaf-warbler

VU 21 C1+2a Japan. \* Philippines

Picathartes gymnocephalus

White-necked Rockfowl

VU 21 A1c+2c

Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone

Picathartes areas

Grey-necked Rockfowl

VU 21 C2a

Cameroon, Equatorial Guinea?, Gabon, Nigeria

Platysteira laticincta

Banded Wattle-eye

VU 21 AIc, B1+2bc, C1+2b

Cameroon

Pamarea dimidiata

Rarotonga Monarch

CR 21 D1

Cook Islands

Pamarea iphis

Iphis Monarch

VU 21 D2

French Polynesia

Pomarea mendozae

Marquesan Monarch

EN 21 BI+2d, C2a French Polynesia

Pomarea nigra

Tahiti Monarch

CR 21 C2b, D1 French Polynesia

Pomarea whitneyi

Fatuhiya Monarch

VU 21 D2

French Polynesia

Prinia burnesii

Rufous-vented Prinia

VU 21 A1c

Bangladesh, India, Pakistan

Prinia leantica

White-eyed Prinia

VU 21 C2a

Côte d'Ivoire, Guinea, Liberia, Sierra

Leone

Pseudocossyphus bensoni

Benson's Rock-thrush

VU 21 D1

Madagascar

Psophodes nigrogularis

Western Whipbird

VU 21 B1+2c, C2a

Australia

Ptilacichla falcata

Falcated Wren-babbler

EN 21 C2a

Philippines

Rhinomyias addita

Streaky-breasted Jungle-flycatcher

VU 21 D2

**Indonesia** 

Rhinomyias albigularis

White-throated Jungle-flycatcher

CR 21 AIc+2c, BI+2c, C1+2a, DI

Philippines

Rhinamyias brunneata

Brown-chested Jungle-flycatcher

VU 21 A1c+2c

China, India (Andaman & Nicobar Is). \* Brunei, Malaysia?, Singapore,

Thailand

Rhinamyias gaadfellawi

Slaty-backed Jungle-flycatcher

VU 21 A2c, BI+2c, C1+2a

Philippines

Rhinomyias insignis

White-browed Jungle-flycatcher

EN 21 C2a

Philippines

Rhipidura malaitae

Malaita Fantail

VU 21 D1

Solomon Islands

Rhipidura semirubra

Manus Fantail

VU 21 D1+2

Papua New Guinea

Rhyacarnis bicalar

Luzon Water-redstart

EN 21 B1+2ce, C2a

Philippines

Saxicala insignis

White-throated Bushchat

VU 21 C1+2a

Kazakhstan, Mongolia, Russia. \*

China?, India, Nepal

Saxicola macrorhyncha

White-browed Bushchat

VU 21 Alac, C1+2a Afghanistan, India, Pakistan

Scepamycter winifredae

Mrs Moreau's Warbler

VU 21 B1+2bc

Tanzania

Sheppardia gabela

Gabela Akalat

EN 21 B1+2ac, C2a

Angola

Sheppardia gunningi

East Coast Akalat

VU 21 B1+2bc

Kenya, Malawi, Mozambique,

Tanzania

Sheppardia lowei

Iringa Akalat

VU 21 B1+2bc

Tanzania

Sheppardia montana

Usambara Akalat VU 21 B1+2ac

Tanzania

Spelaeornis badeigularis

Rusty-throated Wren-babbler VU 21 B1+2c, D1

India

Spelaeornis caudatus

Rufous-throated Wren-babbler

VU 21 B1+2c, C1+2a

Bhutan, India, Nepal

Spelaearnis langicaudatus

Tawny-breasted Wren-babbler

VU 21 B1+2c, C1+2a

India

Stachyris grammiceps

White-breasted Babbler

VU 21 B1+2cd, C1+2a Indonesia

Stachyris herberti

Sooty Babbler VU 21 C1+2a

Laos, Viet Nam

Stachyris hypogrammica

Palawan Striped-babbler VU 21 D2

Philippines

Stachyris latistriata

Panay Striped-babbler

VU 21 B1+2c Philippines

Stachyris nigrarum

Negros Striped-babbler

EN 21 C2b Philippines

Stachyris aglei Snowy-throated Babbler

VU 21 B1+2c, C1+2a

India

Stachyris radalphei

Deignan's Babbler

VU 21 D2

Thailand

Stachyris speciosa

Flame-templed Babbler EN 21 B1+2c, C2a

Philippines

Philippines

Stachyris striata

Luzon Striped-babbler VU 21 A1c+2c, C1+2a

Swynnertonia swynnertoni

Swynnerton's Robin

VU 21 B1+2bc

Mozambique, Tanzania, Zimbabwe

Sylvia buryi

Yemen Warbler

VU 21 B1+2bc, C2a

Saudi Arabia, Yemen



Terpsiphone corvina Seychelles Paradise-flycatcher CR 21 B1+2abce, C2b

Seychelles

Terpsiphone smithii Annobon Paradise-flycatcher VU 21 D1+2

**Equatorial Guinea** Trichastoma woodi

Bagobo Babbler VU 21 C1+2a Philippines

Trichocichla rufa Long-legged Thicketbird CR 21 B1+2e, C2a Fiji

Turdoides hindei Hinde's Pied-babbler

EN 21 B1+2ac, C2a Kenya

Turdus celaenops Izu Thrush VU 21 B1+2e, C1 Japan

Turdus feae Grey-sided Thrush VU 21 B1+2c, C1+2a

China. \* India, Myanmar, Thailand

Turdus helleri Taita Thrush CR 21 B1+2abc Kenya

Turdus ludoviciae Somali Thrush

EN 21 B1+2abc Somalia Turdus menachensis

Yemen Thrush VU 21 B1+2bc, C2a Saudi Arabia, Yemen

Turdus swalesi La Selle Thrush VU 21 B1+2c, C1+2a Dominican Republic, Haiti

Zoothera cinerea Ashy Thrush VU 21 A2c, C1+2a Philippines

Zoothera guttata Spotted Ground-thrush EN 21 C2a

Malawi, Mozambique?, South Africa, Sudan, Zaire. \* Kenya, Tanzania

Zoothera major Amami Thrush CR 21 C2b Japan (Nansei-shoto) Family PARIDAE

Parus nuchalis White-naped Tit VU 21 A1c, C1+2a India

Family SITTIDAE

Sitta formosa Beautiful Nuthatch VU 21 C1+2a Bhutan, China, India, Laos, Myanmar, Thailand, Viet Nam

Sitta ledanti Algerian Nuthatch EN 21 C2a Algeria

Sitta magna Giant Nuthatch VU 21 A1c, C1+2a China, Myanmar, Thailand

Sitta solangiae Yellow-billed Nuthatch VU 21 C1+2a China, Viet Nam

Sitta victoriae White-browed Nuthatch VU 21 D2 Myanmar

Sitta yunnanensis Yunnan Nuthatch VU 21 A1c, C1+2a China

Family DICAEIDAE

Dicaeum haematostictum Visayan Flowerpecker EN 21 Alc, B1+2c, C2a Philippines

Dicaeum proprium Whiskered Flowerpecker VU 21 A2c, B1+2c, C1+2a Philippines

Dicaeum quadricolor Cebu Flowerpecker CR 21 A2c, B1+2c, C1+2b, D1 **Philippines** 

Dicaeum retrocinctum Scarlet-collared Flowerpecker CR 21 A2c, B1+2c **Philippines** 

Pardalotus quadragintus Forty-spotted Pardalote VU 21 B1+2c Australia

Family NECTARINIDAE

Aethopyga duyvenbodei Elegant Sunbird EN 21 B1+2c Indonesia

Anthreptes pallidigaster Amani Sunbird VU 21 B1+2bc Kenya, Tanzania

Anthreptes rubritorques Banded Sunbird VU 21 B1+2bc Tanzania

Nectarinia rockefelleri Rockefeller's Sunbird VU 21 D1 Zaire

Nectarinia rufipennis Rufous-winged Sunbird VU 21 D2 Tanzania

Nectarinia thomensis Giant Sunbird VU 21 D1 São Tomé & Príncipe (São Tomé)

Family ZOSTEROPIDAE

Cleptornis marchei Golden White-eve VU 21 A2e, D2 Northern Marianas

Madanga ruficollis Rufous-throated White-eye VU 21 D2 Indonesia

Rukia ruki Faichuk White-eye EN 21 B1+2c, C2a Federated States of Micronesia

Speirops brunneus Fernando Po Speirops VU 21 D2 Equatorial Guinea (Bioko)

Speirops leucophaeus Príncipe Speirops VU 21 C2b São Tomé & Príncipe (Príncipe)

Speirops melanocephalus Mount Cameroon Speirops VU 21 D2 Cameroon

Zosterops albogularis White-chested White-eye CR 21 D1 Norfolk Island

Zosterops chloronothos Mauritius Olive White-eye CR <sup>21</sup> A1a, B1+2c, C2b Mauritius

Zosterops ficedulinus São Tomé White-eye VU <sup>21</sup> C2a São Tomé & Príncipe

Zosterops griseovirescens Annobon White-eye VU <sup>21</sup> D2 Equatorial Guinea

Zosterops kulalensis Kulal White-eye CR <sup>21</sup> B1+2bc Kenya

Zosterops luteirostris Ghizo White-eye VU <sup>21</sup> D2 Solomon Islands

Zosterops modestus Seychelles White-eye CR <sup>21</sup> C2b, D1 Seychelles

Zosterops mouroniensis Mount Karthala White-eye CR <sup>21</sup> B1+2bc Comoros

Zosterops oleagineus
Yap Olive White-eye
VU <sup>21</sup> D2
Federated States of Micronesia

Zosterops rotensis Rota White-eye CR <sup>21</sup> A1a, B1+2de Northern Marianas

Zosterops samoensis Samoan White-eye VU <sup>21</sup> C2a, D2 Western Samoa

Zosterops silvanus Taita White-eye CR <sup>21</sup> B1+2bc Kenya

Zosterops tenuirostris
Slender-billed White-eye
VU <sup>21</sup> D2
Norfolk Island

Zosterops tephropleurus Lord Howe Island White-eye VU <sup>21</sup> D2 Australia

Zosterops winifredae South Pare White-eye VU <sup>21</sup> B1+2c, C2a Tanzania Family MELIPHAGIDAE

Apalopteron familiare Bonin Honeyeater VU <sup>21</sup> D2 Japan

Grantiella picta
Painted Honeyeater
VU 21 C2a

Australia

Gymnomyza aubryana
Crow Honeyeater
VU <sup>21</sup> B1+2c, C2b
New Caledonia

Gymnomyza samoensis Mao VU<sup>21</sup> A1c, C2a American Samoa (ex), Western

Manorina melanotis Black-eared Miner CR <sup>21</sup> C2a, D1 Australia

Samoa

Melidectes princeps
Long-bearded Melidectes
VU <sup>21</sup> B1+2ce, C2a
Papua New Guinea

Moho bishopi
Bishop's Oo
CR 21 B1+2ce, C2a, D1
USA (Hawaiian Is)

Moho braccatus

Kauai Oo

CR <sup>21</sup> A1a, B1+2ce, C2b, D1

USA (Hawaiian Is)

Myzomela chermesina Rotuma Myzomela VU <sup>21</sup> D2

Notiomystis cincta Stitchbird VU <sup>21</sup> D2 New Zealand

Fiii

Xanthomyza phrygia Regent Honeyeater EN <sup>21</sup> C2a Australia

Family EMBERIZIDAE

Atlapetes flaviceps
Yellow-headed Brush-finch
EN <sup>21</sup> B1+2ac, C2a
Colombia

Atlapetes pallidiceps
Pale-headed Brush-finch
CR <sup>21</sup> Alc, B1+2c, C2b
Ecuador

Bangsia aureocincta
Gold-ringed Tanager
VU <sup>21</sup> B1+2c, C1
Colombia

Bangsia melanochlamys Black-and-gold Tanager EN <sup>21</sup> C1+2a Colombia

Buthraupis aureodorsalis
Golden-backed Mountain-tanager
VU <sup>21</sup> D2
Peru

Buthraupis wetmorei
Masked Mountain-tanager
VU <sup>21</sup> Alc+2c, Bl+2c, Cl+2a
Colombia, Ecuador, Peru

Calyptophilus frugivorus
Chat-tanager
VU <sup>21</sup> A1c, C1+2a
Dominican Republic, Haiti

Camarhynchus heliobates Mangrove Finch EN <sup>21</sup> D1 Ecuador (Galápagos Is)

Chlorochrysa nitidissima Multicoloured Tanager VU <sup>21</sup> C1 Colombia

Chlorospingus flavovirens Yellow-green Bush-tanager VU <sup>21</sup> C2a, D2 Colombia, Ecuador

Conothraupis mesoleuca Cone-billed Tanager VU <sup>21</sup> D1 Brazil

Coryphaspiza melanotis
Black-masked Finch
VU <sup>21</sup> A1c
Argentina, Bolivia, Brazil, Paraguay,
Peru

Dacnis berlepschi
Scarlet-breasted Dacnis
VU <sup>21</sup> C1
Colombia, Ecuador

Dacnis nigripes
Black-legged Dacnis
VU <sup>21</sup> C1
Brazil

Venezuela

Diglossa venezuelensis Venezuelan Flowerpiercer CR <sup>21</sup> A2c

Emberiza jankowskii
Rufous-backed Bunting
VU <sup>21</sup> C1+2a
China, North Korea, Russia



Emberiza socotrana

Socotra Bunting
VU 21 D1

Yemen

Emberiza sulphurata

Yellow Bunting

VU 21 C1+2a

Japan. \* China, Hong Kong, North Korea, Philippines, South Korea,

Taiwan

Gubernatrix cristata

Yellow Cardinal

EN 21 Alad+2d

Argentina, Brazil, Paraguay (ex?), Uruguay

Habia atrimaxillaris

Black-cheeked Ant-tanager

VU 21 B1+2c, C1+2b

Costa Rica

Hemispingus goeringi

Slaty-backed Hemispingus

VU 21 B1+2c, C1+2a

Venezuela

Junco insularis

Guadalupe Junco

CR 21 B1+2e, C2b

Mexico

Nemosia rourei

Cherry-throated Tanager

CR 21 D1

Brazil

Nesospiza acunhae

Tristan Bunting

VU 21 D2

St Helena (Tristan da Cunha)

Nesospiza wilkinsi

Grosbeak Bunting

VU 21 D1+2

St Helena (Tristan da Cunha)

Oreothraupis arremonops

Tanager-finch

VU 21 C2a

Colombia, Ecuador

Pinaroloxias inornata

Cocos Finch

VU 21 D2

Costa Rica

Poospiza alticola

Plain-tailed Warbling-finch

EN 21 C2a

Peru

Poospiza baeri

Tucumán Mountain-finch

VU 21 D1

Argentina

Poospiza garleppi

Cochabamba Mountain-finch

EN 21 B1+2c, C1+2b

Bolivia

Poospiza rubecula

Rufous-breasted Warbling-finch

EN 21 C2a

Peru

Pselliophorus luteoviridis

Yellow-green Finch

VU 21 D2

Panama

Pseudodacnis hartlaubi

Turquoise Dacnis

VÛ 21 Alc, B1+2c, C1+2a

Colombia

Rowettia goughensis

Gough Bunting

VU 21 D1+2

St Helena (Tristan da Cunha)

Saltator rufiventris

Rufous-bellied Saltator

 $VU^{-21}$  C2a

Argentina, Bolivia

Spizella wortheni

Worthen's Sparrow

EN 21 C2a

Mexico, USA (ex)

Sporophila falcirostris

Temminck's Seedeater

EN 21 A1c, C1+2b

Argentina, Brazil, Paraguay

Sporophila frontalis

Buffy-fronted Seedeater

EN 21 Alc, C1+2b

Argentina?, Brazil, Paraguay

Sporophila insulata

Tumaco Seedeater

CR 21 D1

Colombia

Sporophila melanops

Hooded Seedeater

VU 21 D1

Brazil

Sporophila nigrorufa

Black-and-tawny Seedeater

EN 21 A1c

Bolivia, Brazil

Sporophila palustris

Marsh Seedeater EN 21 A1cd+2cd

Argentina, Brazil, Paraguay, Uruguay

Sporophila zelichi

Entre Ríos Seedeater

CR 21 A2cd, C1+2b

Argentina

Tangara cabanisi

Azure-rumped Tanager

EN 21 A2c

Guatemala, Mexico

Tangara fastuosa

Seven-coloured Tanager

EN 21 A2cd

Brazil

Tangara meyerdeschauenseei

Green-capped Tanager

VU 21 D2

Peru

Tangara peruviana

Black-backed Tanager

EN 21 A2c

Brazil

Torreornis inexpectata

Cuban Sparrow

EN 21 B1+2c, C1+2a

Cuba

Wetmorethraupis sterrhopteron

Orange-throated Tanager

EN 21 A2c

Ecuador, Peru

Xenospingus concolor

Slender-billed Finch

VU 21 A2c, B1+2c, C1+2a

Chile, Peru

Xenospiza baileyi

Sierra Madre Sparrow EN 21 B1+2c, C1+2a

Mexico

Family PARULIDAE

Basileuterus griseiceps

Grey-headed Warbler CR <sup>21</sup> A2c

Venezuela

Catharopeza bishopi Whistling Warbler

VU 21 D2

St Vincent

Conirostrum tamarugense

Tamarugo Conebill

VU 21 C1

Chile, Peru

Dendroica chrysoparia

Golden-cheeked Warbler

EN 21 Alce

USA. \* Guatemala, Honduras,

Mexico, Nicaragua

Dendroica kirtlandii

Kirtland's Warbler

VU <sup>21</sup> D1+2 Canada?, USA. \* Bahamas, Turks

and Caicos Islands

Geothlypis beldingi

Belding's Yellowthroat VU 21 A1c+2c, B1+2c

Mexico

Geothlypis speciosa

Black-polled Yellowthroat

VU 21 A1c+2c, B1+2c, C1+2a

Mexico

Leucopeza semperi Semper's Warbler

CR 21 D1 St Lucia

Myioborus cardonai

Guaiquinima Whitestart

 $VU^{21}$  D2 Venezuela

Myioborus pariae

Paria Whitestart

CR 21 B1+2c Venezuela

Vermiyora bachmanii Bachman's Warbler

CR 21 DI

USA. \* Cuba?

Xenoligea montana

White-winged Warbler VU 21 A1c, B1+2c, C1+2a

Dominican Republic, Haiti

## Family DREPANIDIDAE

Hemignathus lucidus

Nukupuu

CR 21 A1a, B1+2ce, C2a, D1 USA (Hawaiian 1s)

Hemignathus wilsoni

Akiapolaau

EN 21 B1+2ce, C2a USA (Hawaiian Is)

Loxioides bailleui

Palila

EN 21 B1+2e, C2a USA (Hawaiian 1s)

Loxops caeruleirostris

Akekee

EN 21 B1+2ce USA (Hawaiian Is)

Loxops coccineus

Akepa

EN 21 B1+2abcde USA (Hawaiian Is)

Melamprosops phaeosoma

Poo-uli

CR 21 Alace, B1+2abcde, C2a, D1 USA (Hawaiian 1s)

Oreomystis bairdi

Akikiki

EN 21 B1+2abcde USA (Hawaiian Is)

Oreomystis mana

Hawaii Creeper

EN 21 B1+2abcde

USA

Palmeria dolei

Akohekohe

VU 21 D2

USA (Hawaiian Is)

Paroreomyza maculata

Oahu Alauahio

CR 21 AIa, BI+2ce, C2a, D1 USA (Hawaiian Is)

Pseudonestor xanthophrys

Maui Parrotbill

VU 21 DI+2

USA (Hawaiian Is)

Psittirostra psittacea

CR 21 A1ac, B1+2abcde, C2a, D1

USA (Hawaiian Is)

Telespiza cantans

Laysan Finch

VU 21 D2

USA [int] (Hawaiian Is)

Telespiza ultima

Nihoa Finch

VU 21 D2

USA [int] (Hawaiian Is)

Viridonia parva

Anianiau

VU 21 A1acd, D2

USA (Hawaiian 1s)

Viridonia stejnegeri Kauai Amakihi

VU 21 A1acd, D2

USA (Hawaiian Is)

Family VIREONIDAE

Vireo atricapillus

Black-capped Vireo

EN 21 A1cd+2d

Mexico, USA

Vireo caribaeus

San Andrés Vireo

CR 21 B1+2bc

Colombia (San Andrés Id)

Vireo gracilirostris

Noronha Vireo

VU 21 D2

Brazil

Vireo sp. Chocó Vireo

VU 21 D2

Colombia

Family ICTERIDAE

Agelaius flavus

Saffron-cowled Blackbird

EN 21 Alac+2ce

Argentina, Brazil, Paraguay, Uruguay

Agelaius xanthomus

Yellow-shouldered Blackbird

EN 21 B1+2cd, C1+2a

Puerto Rico

Cacicus koepckeae

Selva Cacique VU 21 A2c, C1+2b

Peru

Curaeus forbesi

Forbes's Blackbird

CR 21 A2cde, C1+2a

Brazil

Gymnostinops cassini

Baudó Oropendola

EN 21 A2c

Colombia

Hypopyrrhus pyrohypogaster

Red-bellied Grackle

EN 21 CI+2a

Colombia

Icterus bonana Martinique Oriole

EN 21 Ale, B1+2e, CI+2b

Martinique

Sturnella militaris

Pampas Meadowlark

EN 21 Alc

Argentina, Brazil?, Uruguay, \* Brazil?, Uruguay

Family FRINGILLIDAE

Carduelis cucullata

Red Siskin

EN 21 C2a

Colombia, Puerto Rico [int],

Trinidad and Tobago (ex), Venezuela

Carduelis johannis

Warsangli Linnet

EN 21 B1+2abc

Somalia

Carduelis siemiradzkii

Saffron Siskin

VU 21 B1+2c, C1+2a

Ecuador, Peru?

Carduelis yarrellii

Yellow-faced Siskin

VU 21 Ald+2d Brazil, Venezuela

Neospiza concolor

São Tomé Grosbeak

CR 21 D1 São Tomé & Príncipe (São Tomé

Serinus ankoberensis

Ankober Serin

EN 21 BI+2c

Ethiopia



Serinus flavigula Yellow-throated Serin EN 21 D1 Ethiopia

Serinus xantholaema

Salvadori's Serin VU 21 C2b

Ethiopia Family ESTRILDIDAE

Amandava formosa Green Avadavat

VU 21 C1+2a

India

Chloebia gouldiae Gouldian Finch

EN 21 B1+2de

Australia

Cryptospiza shellevi Shelley's Crimson-wing

VU 21 Ala, C1+2a

Burundi, Rwanda, Uganda, Zaire

Erythrura coloria Red-eared Parrotfinch

VU 21 B1+2c, C2a **Philippines** 

Erythrura kleinschmidti Pink-billed Parrotfinch

EN 21 B1+2e, C2a

Fiji

Erythrura regia Royal Parrotfinch

VU 21 A2c Vanuatu

Erythrura viridifacies Green-faced Parrotfinch

EN 21 A2c, C1+2a Philippines

Estrilda nigriloris Black-lored Waxbill

VU 21 B1+2ac Zaire

Estrilda poliopareia

Anambra Waxbill VU 21 B1+2bc, D1

Nigeria

Lonchura vana Grey-banded Munia

VU 21 B1+2c

Indonesia

Neochmia ruficauda

Star Finch VU 21 C2a

Australia Padda oryzivora

Java Sparrow VU 21 Ald

Fiji [int], Indonesia, USA [int]

Family PLOCEIDAE

Foudia flavicans Rodrigues Fody

VU 21 D1+2

Mauritius (Rodrigues)

Foudia rubra

Mauritius Fody

CR 21 B1+2abce, C2b Mauritius

Foudia sechellarum Seychelles Fody

**V**U 21 D2

Seychelles Malimbus ballmanni

Gola Malimbe

EN 21 A2c

Côte d'Ivoire?, Guinea, Liberia,

Sierra Leone

Malimbus flavipes Yellow-legged Weaver

VU 21 C2a, D1

Zaire

Malimbus ibadaneusis

Ibadan Malimbe

CR 21 C2a Nigeria

Ploceus aureonucha

Golden-naped Weaver

VU 21 C2b, D1

Zaire

Ploceus bannermani

Bannerman's Weaver

VU 21 B1+2abc, C2a

Cameroon, Nigeria?

Ploceus batesi

Bates's Weaver

VU 21 C2a

Cameroon

Ploceus burnieri

Kilombero Weaver

VU 21 B1+2c, C2b, D1

Tanzania

Ploceus golandi

Clarke's Weaver

VU 21 D1+2

Kenya

Ploceus megarhynchus

Yellow Weaver

VU 21 C1+2a

India

Ploceus nicolli

Tanzanian Mountain Weaver

VU 21 B1+2bc, C2a, D1

Tanzania

Ploceus nigrimentum

Black-chinned Weaver

VU 21 C2a

Angola, Congo?, Gabon

Ploceus ruweti

Lake Lufira Weaver

VU 21 D2

Zaire

Ploceus subpersonatus

Loango Weaver

VU 21 B1+2c, C2a

Angola, Gabon, Zaire

Family STURNIDAE

Aplonis brunneicapilla White-eyed Starling

EN 21 C2a

Papua New Guinea, Solomon Islands

Aplonis cinerascens

Rarotonga Starling

VU 21 D1+2

Cook Islands

Aplonis pelzelni

Pohnpei Mountain Starling

CR 21 B1+2be, C2b, D1

Federated States of Micronesia

Aplonis santovestris

Santo Mountain Starling

VU 21 D2 Vanuatu

Cinnyricinclus femoralis

Abbott's Starling

VU 21 B1+2c, C2a

Kenya, Tanzania

Leucopsar rothschildi

Bali Starling CR 21 B1+2e, C1+2b, D1

Indonesia Onychognathus frater

Socotra Starling

VU 21 D1

Yemen

Family ORIOLIDAE

Oriolus crassirostris

São Tomé Oriole

VU 21 C2b

São Tomé & Príncipe

Oriolus isabellae

Isabela Oriole

CR 21 C2a, D1

**Philippines** 

Oriolus mellianus Silver Oriole

VU 21 B1+2c, C1+2a

China. \* Cambodia, Thailand

Family DICRURIDAE

Dicrurus fuscipennis

Grand Comoro Drongo

CR 21 C2a

Comoros

Dicrurus waldenii Mayotte Drongo CR <sup>21</sup> C2b, D1

Mayotte

Family CALLAEIDAE

Callaeas cinerea Kokako EN <sup>21</sup> C2a New Zealand

Family PTILONORHYNCHIDAE

Archboldia papuensis Archbold's Bowerbird VU <sup>21</sup> Cl

Indonesia

Sericulus bakeri

Fire-maned Bowerbird

VU <sup>21</sup> C2b

Papua New Guinea

Family PARADISAEIDAE

Astrapia mayeri
Ribbon-tailed Astrapia
VU <sup>21</sup> B1+2ce
Papua New Guinea
Epimachus fastuosus
Black Sicklebill

VU <sup>21</sup> A2cd, C2a Indonesia, Papua New Guinea *Macgregoria pulchra* 

Macgregor's Bird-of-paradise VU <sup>21</sup> B1+2e, C2a Indonesia, Papua New Guinea

Paradisaea decora
Goldie's Bird-of-paradise
VU <sup>21</sup> B1+2c
Papua New Guinea

Paradisaea rudolphi Blue Bird-of-paradise VU <sup>21</sup> C1+2a Papua New Guinea

Parotia wahnesi Wahnes's Parotia

VU <sup>21</sup> C1 Papua New Guinea

Family CORVIDAE

Corvus florensis
Flores Crow
VU 21 B1+2c, C1+2a
Indonesia
Corvus hawaiiensis

Hawaiian Crow
CR <sup>21</sup> Dl
USA (Hawaiian Is)

Corvus kubaryi
Mariana Crow
CR <sup>21</sup> B1+2cde
Guam, Northern Marianas

White-necked Crow
VU 21 A1c, C1+2a

Dominican Republic, Haiti, Puerto Rico (ex)

Corvus unicolor Banggai Crow VU <sup>21</sup> DI Indonesia

Crypsirina cucullata
Hooded Treepie
VU <sup>21</sup> A1c, C1+2a
Myanmar
Cyanolyca mirabilis

White-throated Jay

EN <sup>21</sup> A1c+2c, B1+2c, C1+2a

Mexico

Cyanolyca nana Dwarf Jay EN <sup>21</sup> Alc+2c, B1+2c, C1+2b Mexico

Garrulus lidthi Lidth's Jay VU<sup>21</sup> C1+2b Japan

Perisoreus internigrans

Sichuan Jay VU <sup>21</sup> C1+2a China

Podoces biddulphi Xinjiang Ground-jay

VU 21 C1+2a China

Urocissa ornata Sri Lanka Magpie VU<sup>21</sup> B1+2ac, C1+2a Sri Lanka

Zavattariornis stresemanni Ethiopian Bush-crow VU <sup>21</sup> B1+2abc, C2b Ethiopia

Class **REPTILIA** 

Order CROCODYLIA

Family ALLIGATORIDAE

Alligator sinensis Chinese Alligator CR <sup>55</sup> Alc, Dl China [R. Yangtze] Melanosuchus ni

Melanosuchus niger
Black Caiman
EN <sup>55</sup> A1cd
Bolivia, Brazil, Colombia, Ecuador,
French Guiana, Guyana, Paraguay,
Peru, Venezuela

Family CROCODYLIDAE

Crocodylus acutus
American Crocodile
VU 55 Alac
Belize?, Colombia, Costa Rica,
Cuba, Dominican Republic, Ecuador,
El Salvador, Guatemala, Haiti,
Honduras, Jamaica, Mexico,
Nicaragua, Panama, Peru, USA,

Crocodylus intermedius
Orinoco Crocodile
CR 55 Alc, C2a
Colombia, Venezuela

Venezuela

Crocodylus mindorensis Philippines Crocodile CR 55 A1c, C2a Philippines

Crocodylus palustris
Mugger
VU 55 A1a, C2a
Bangladesh (ex?), India, Iran, Nepal,
Pakistan, Sri Lanka

Crocodylus rhombifer Cuban Crocodile EN <sup>55</sup> Alce, B1+2c Cuba

Crocodylus siamensis
Siamese Crocodile
CR <sup>55</sup> Alac
Brunei?, Cambodia, Indonesia,
Laos?, Malaysia, Myanmar?,
Thailand (ex?), Viet Nam

Osteolaemus tetraspis
West African Dwarf Crocodile
VU <sup>55</sup> A2cd
Angola, Benin, Burkina Faso,
Cameroon, Central African Republic,
Congo, Côte d'Ivoire, Gabon,
Gambia, Ghana, Guinea,
Guinea-Bissau, Liberia, Nigeria,
Senegal, Sierra Leone, Togo,

Family GAVIALIDAE

Uganda?, Zaire

Gavialis gangeticus Gharial EN <sup>55</sup> C2a, E Bangladesh, Bhutan?, India, Nepal, Pakistan

Order RHYNCHOCEPHALIA

Family SPHENODONTIDAE

Sphenodon guntheri
Brother's Island Tuatara
VU <sup>14</sup> D1+2
New Zealand



#### Order SAURIA

#### Family AGAMIDAE

Calotes liocephalus
Spineless Forest Lizard
EN 185 B1+2bc
Sri Lanka

Ceratophora tennentii
Tennent's Leaf-nosed Lizard
EN <sup>185</sup> B1+2bc
Sri Lanka

Ctenophorus yinnietharra Yinnietharra Rock Dragon VU <sup>14</sup> D2 Australia

#### Family ANGUIDAE

Abronia montecristoi CR <sup>185</sup> B1+2c El Salvador

Diploglossus anelpistus CR <sup>126</sup> B1+2abcd Dominican Republic

Diploglossus carruai EN <sup>126</sup> B1+2bc Dominican Republic

Diploglossus montisserrati Monsterrat Galliwasp

CR 57 B1+2c Montserrat

Gerrhonotus panamintus Panamint Alligator Lizard VU <sup>185</sup> D2 USA

#### Family CHAMAELEONIDAE

Bradypodion setaroi Setaro's Dwarf Chamaeleon EN <sup>185</sup> B1+2c South Africa

Bradypodion taeniabronchum Smith's Dwarf Chamaeleon CR <sup>185</sup> B1+2c South Africa

Brookesia peramata VU 106 Ald, D2 Madagascar

Furcifer campani VU 106 Alcd Madagascar

Furcifer labordi VU 106 A1cd Madagascar

Furcifer minor VU 106 Alcd Madagascar

#### Family CORDYLIDAE

Cordylus cataphractus
Armadillo Girdled Lizard
VU <sup>185</sup> A2d
South Africa

Cordylus giganteus Giant Girdled Lizard VU <sup>185</sup> A2cd South Africa

Cordylus mclachlani McLachlan's Girdled Lizard VU <sup>185</sup> D2 South Africa

Pseudocordylus nebulosus nov. VU <sup>185</sup> D2 South Africa

Tetradactylus breyeri
Breyer's Long-tailed Seps
VU 185 A1c+2c
South Africa

#### Family GEKKONIDAE

Christinus guentheri VU <sup>14</sup> B1+2c, D2 Australia, Norfolk Island

Goniosaurus kuroiwae Kuroiwa's Ground Gecko VU <sup>185</sup> B1+2cd Japan (Nansei-shoto)

Hoplodactylus stephensi Stephen's Island Gecko VU <sup>14</sup> D2 New Zealand

Lepidoblepharis montecanoensis Paraguanan Ground Gecko CR <sup>110</sup> B1+2c Venezuela

Lepidodactylus listeri VU <sup>14</sup> D2 Christmas Island

Lygodactylus methueni Methuen's Dwarf Gecko VU <sup>185</sup> B1+2c South Africa

Nactus serpensinsula Serpent Island Gecko VU 106 D2 Mauritius

Nephrurus deteani EN <sup>14</sup> B1+2c Australia

Phelsuma guentheri
Round Island Day Gecko
EN <sup>106</sup> D1
Mauritius

Phelsuma standingi Standing's Day Gecko VU 106 A1cd Madagascar

Phyllodactylus europaeus
European Leaf-toed Gekko
VU <sup>65</sup> A1a, B1+2b
France, Italy, Tunisia

Sphaerodactylus micropithecus Monito Gecko EN <sup>174</sup> D1 Puerto Rico

## Family HELODERMATIDAE

Heloderma horridum Beaded Lizard VU <sup>16</sup> A2cd Guatemala, Mexico

Heloderma suspectum Gila Monster VU <sup>16</sup> A2cd Mexico, USA

### Family IGUANIDAE

Amblyrhynchus cristatus Galápagos Marine Iguana VU <sup>185</sup> Alce Ecuador (Galápagos Is)

Anolis roosevelti
Roosevelt's Giant Anole
CR <sup>50</sup> A2ce
Puerto Rico, Virgin Islands (British),
Virgin Islands (US)

Brachylophus fasciatus
Fiji Banded Iguana
EN <sup>14</sup> A1c
Fiji, Tonga, Vanuatu [int]

Brachylophus vitiensis Fiji Crested Iguana CR <sup>14</sup> Alc, B1+2c Fiji

Conolophus pallidus
Barrington Land Iguana
VU 185 D2
Ecuador (Galápagos Is)

Conolophus subcristatus
Galápagos Land Iguana
VU 185 D2
Ecuador (Galápagos Is)

Cyclura carinata
CR <sup>73</sup> B1+2abcde
Baharnas, Turks and Caicos Islands

Cyclura collei Jamaican lguana CR <sup>74</sup> B1+2c Jamaica Cyclura cornuta
Rhinoceros Iguana
VU <sup>57</sup> Alacde+2ce
Dominican Republic, Haiti, Puerto

Rico, USA

Cyclura cychlura
Bahama Island Rock Iguana
VU <sup>23</sup> Alace, B1+2b, C1
Bahamas

Cyclura nubila
Cuban Ground Iguana
VU <sup>57</sup> A1cde+2ce
Cayman Islands, Cuba, Puerto Rico
[int]

Cyclura pinguis
Anegada Rock Iguana
CR <sup>76</sup> Alabcde, B1+2abce, C1+2b
Virgin Islands (British)

Cyclura ricordi Ricord's Iguana CR <sup>126</sup> A1ce+2cd, B1+2ce Dominican Republic

Cyclura rileyi San Salvador Rock Iguana EN <sup>39</sup> C2a Bahamas

Gambelia silus
Blunt-nosed Leopard Lizard
EN <sup>75</sup> A1ce
USA

Iguana delicatissima
Lesser Antillean Iguana
VU <sup>32</sup> Alacde+2cde, B1+2abcde
Anguilla, Antigua and Barbuda,
Dominica, Guadeloupe (St
Barthélémy, St Martin), Martinique,
Netherlands Antilles, St Kitts and

Liolaemus huacahuasicus VU <sup>185</sup> D2 Argentina

Liolaemus rabinoi VU <sup>185</sup> A1c, D2 Argentina [Lago Nihuil]

Nevis (ex)

Uma inornata
Coachella Valley Fringe-toed Lizard
EN <sup>75</sup> A1a, B1+2c
USA

# Family LACERTIDAE

Algyroides marchi VU 65 B1+2cd Spain Gallotia simonyi Hierro Giant Lizaro

Hierro Giant Lizard CR <sup>65</sup> B1+2e, C2b Spain (Canary Is) Lacerta bonnali VU 65 B1+2cd Spain

Lacerta clarkorum EN 65 C2a Georgia, Turkey

Podarcis lilfordi Lilford's Wall Lizard VU 65 B1+2bd, D2 Spain (Balearic Is)

Podarcis milensis VU 65 B1+2bd, D2 Greece

Podarcis pityusensis Ibiza Wall Lizard VU 65 D2 Spain (Balearic Is)

#### Family PYGOPODIDAE

Aprasia aurita VU <sup>14</sup> B1+2c Australia

Delma impar
Striped Legless Lizard
VU 14 Alc
Australia

Delma labialis
Striped Tailed Delma
VU <sup>14</sup> A1c+2c, B1+2c
Australia

Delma torquata
Collared Delma
VU <sup>14</sup> A1c+2c
Australia

Ophidiocephalus taeniatus Bronzeback Snake-lizard VU <sup>14</sup> A1ac, B1+2c Australia

Paradelma orientalis Brigalow Scaly-foot VU <sup>14</sup> A1c+2c Australia

#### Family SCINCIDAE

Acanthiops lineatus
Woodbush Legless Skink
VU 185 A2c
South Africa

Anomalopus mackayi
Long-legged Worm-skink
VU 14 A1c, B1+2c
Australia

Ctenotus lancelini
Lancelin Island Skink
VU 14 D2
Australia

Ctenotus zastictus Hamelin Ctenotus VU <sup>14</sup> D2 Australia

Cyclodina alani Robust Skink VU <sup>14</sup> D1+2 New Zealand

Cyclodina macgregori MacGregor's Skink VU <sup>14</sup> D2 New Zealand

Cyclodina whitakeri Whitaker's Skink VU <sup>14</sup> D1+2 New Zealand

Egernia kintorei
Great Desert Skink
VU <sup>14</sup> A1c
Australia

Eulamprus leuraensis Blue Mountain Water Skink EN <sup>14</sup> B1+2c Australia

Eumeces longirostris Bermuda Rock Skink CR <sup>50</sup> B1+2bcde Bermuda

Leiolopisma telfairii Round Island Skink VU <sup>106</sup> D2 Mauritius

Lerista allanae Allan's Lerista CR <sup>14</sup> Alc, B1+2c Australia

Lerista vittata Mount Cooper Striped Lerista EN <sup>14</sup> A1c, B1+2c Australia

Neoseps reynoldsi Sand Skink VU 75 A2ce USA

Niveoscincus palfreymani Pedra Branca Skink VU <sup>14</sup> D2 Australia

Oligosoma grande Grand Skink VU <sup>14</sup> C2a New Zealand

Oligosoma homalonotum Chevron Skink VU <sup>14</sup> D2 New Zealand



Oligosoma lichenigera
Lord Howe Island Skink
VU <sup>14</sup> B1+2c, D2
Australia, Norfolk Island

Oligosoma microlepis Small-scaled Skink VU <sup>14</sup> B1+2bcd New Zealand

Oligosoma otagense Otago Skink VU <sup>14</sup> C2a New Zealand

Oligosoma striatum Striped Skink VU <sup>14</sup> B1+2bcd New Zealand

Oligosoma waimatense Scree Skink VU <sup>14</sup> B1+2bd New Zealand

Scelotes guentheri
Günther's Dwarf Burrowing Skink
VU 185 A2c
South Africa

Scelotes kasneri
Kasner's Dwarf Burrowing Skink
VU 185 A2c
South Africa

Tiliqua adelaidensis
Pygmy Bluetongue
EN <sup>14</sup> B1+2c
Australia

Typhlosaurus lomii Lomi's Blind Legless Skink VU <sup>185</sup> A2c South Africa

Family TEIIDAE

Ameiva polops
Saint Croix Ground Lizard
CR <sup>120</sup> B1+2ae
Virgin Islands (US)

Cnemidophorus vanzoi St Lucia Whiptail VU <sup>74</sup> D2 St Lucia

Family VARANIDAE

Varanus komodoensis Komodo Dragon VU <sup>185</sup> B1+2cde Indonesia

Varanus olivaceus
Gray's Monitor
VU 185 A1c
Philippines

Family XANTUSIIDAE

Xantusia riversiana Island Night Lizard VU 75 D2 USA

Order SERPENTES

Family BOIDAE

Acrantophis dumerili
Dumeril's Boa
VU <sup>106</sup> A1cd
Madagascar, Réunion? [int]
Acrantophis madagascariensis

Madagascar Boa VU <sup>106</sup> A1cd Madagascar

Aspidites ramsayi Woma EN <sup>13</sup> A1c Australia

Casarea dussumieri
Round Island Keel-scaled Boa
EN 106 D1
Mauritius

Epicrates subflavus Jamaican Boa VU <sup>74</sup> A2ce Jamaica

Sanzinia madagascariensis Madagascar Tree Boa VU <sup>106</sup> A1cd Madagascar

Family COLUBRIDAE

Achalinus werneri Amami Takachiho Snake VU <sup>185</sup> B1+2c Japan (Nansei-shoto)

Adelphicos daryi EN 185 B1+2c Guatemala

Alsophis antiguae
Antiguan Racer
CR 57 C2b, D1
Antigua and Barbuda

Alsophis ater
Black Racer
CR 74 B1+2ce
Jamaica

Alsophis rijersmai
Leeward Island Racer
EN <sup>57</sup> A2ce, B1+2ce
Anguilla, Guadeloupe (St
Barthélémy, St Martin), Netherlands
Antilles

Alsophis rufiventris
Red-bellied Racer
EN <sup>57</sup> B1+2ce
Netherlands Antilles, St Kitts and
Nevis (ex)

Chironius vincenti St Vincent Blacksnake CR <sup>88</sup> B1+2ac St Vincent

Coluber cypriensis EN <sup>65</sup> C2a, D1 Cyprus

Coluber gyorensis CR 65 D1 Greece

Iguanognathus werneri VU <sup>185</sup> D2 Indonesia

Lamprophis fiskii Fisk's House Snake VU <sup>185</sup> A2cd, B1+2c South Africa

Liophis cursor CR <sup>31</sup> B1+2e, C2b, D1 Martinique

Liophis ornatus St Lucia Racer EN <sup>74</sup> D1 St Lucia

Liophis perfuscus
Barbados Racer
EN <sup>38</sup> C2b
Barbados

Natrix megalocephala
Large-headed Water Snake
VU 65 Ald, C1
Azerbaijan, Georgia, Russia, Turkey

Opisthotropis kikuzatoi Kikuzato's Brook Snake CR <sup>185</sup> B1+2c Japan (Nansei-shoto)

Thamnophis gigas
Giant Garter Snake
VU 15 Alcde+2cde
USA

Thermophis baileyi VU <sup>185</sup> D2 China

Family ELAPIDAE

Austrelaps labialis
Pygmy Copperhead
VU <sup>14</sup> B1+2c
Australia

Denisonia maculata

Ornamental Snake

VU 14 A1c+2c

Australia

Echiopsis atriceps

Lake Cronin Snake VU 14 D2

Australia

Echiopsis curta VU 14 B1+2c

Australia

Furina dunmalli

Dunmall's Snake

VU 14 Alc+2c

Australia

Hoplocephalus bungaroides

Broad-headed Snake

VU 14 B1+2c

Australia

Ogmodon vitianus

Fiji Snake

VU 14 B1+2c, D2

Fiji

Family HYDROPHIIDAE

Laticauda crockeri

VU 14 B1+2c, D2

Solomon Islands

[L. Te-Nggana]

Family TYPHLOPIDAE

Ramphotyphlops exocoeti Christmas Island Blind Snake

VU 14 D2

Christmas Island

Typhlops monensis

Mona Blind Snake

EN 174 D1

Puerto Rico

Family VIPERIDAE

Bitis inornata

Plain Mountain Adder

VU 185 A2cd, B1+2ab

South Africa

Bitis schneideri

Namagua Dwarf Adder

VU iss A2cd

Namibia, South Africa

Bothrops insularis

Golden Lancehead

CR 186 A2d

Brazil

Crotalus unicolor

Aruba Island Rattlesnake

CR 124 C2b

Aruba

Macrovipera schweizeri

Cyclades Blunt-nosed Viper

CR 65 Albcd+2bcd, B1+2bce, C2a

Trimeresurus mangshanensis

VU 185 D2

China

Vipera albizona

EN 65 B1+2e, C2a

Turkey

Vipera bornmuelleri

VU 185 B1+2c

Lebanon, Syria

Vipera bulgardaghica

CR 65 B1+2e, C2a

Turkey

Vipera darevskii

CR 65 C2b

Armenia, Georgia

Vipera dinniki

VU 65 C1+2a

Georgia, Russia

Vipera kaznakovi

Caucasian Viper

EN 65 Alcd+2cd

Georgia, Russia, Turkey

Vipera latifii

Latifi's Viper

VU 185 B1+2c

Iran

Vipera pontica

CR 65 C2ab, D1

Georgia?, Turkey

Vipera ursinii

EN 65 Alc+2c

Austria?, France, Greece, Hungary,

Italy, Romania, Turkey, Ukraine

Vipera wagneri

EN 65 A1d+2d, B1+2e, C1

Iran, Turkey

Order TESTUDINES

Family CARETTOCHELYIDAE

Carettochelys insculpta

Pig-nose Turtle

VU 176 A1bd

Australia, Indonesia, Papua New

Guinea

Family CHELIDAE

Acanthochelys chacoensis

Chaco Swamp Turtle

VU 176 B1+2a

Argentina

Acanthochelys pallidipectoris

Chaco Side-necked Turtle

VU 176 Alc, D1

Argentina, Bolivia?, Paraguay

Chelodina mccordi

Roti Island Snake-necked Turtle

VU 176 D2

Indonesia

Chelodina parkeri

Parker's Snake-necked Turtle

VU 176 D2

Indonesia, Papua New Guinea

Chelodina pritchardi

Pritchard's Snake-necked Turtle

VU 176 D2

Papua New Guinea

Elseya sp. 1

Namoi River Snapping Turtle

EN 176 B1+2c

Australia

[R. Darling]

Elusor macrurus

Mary River Turtle

EN 176 B1+2c

Australia [R. Mary]

Hydromedusa maximiliani

Brazilian Snake-necked Turtle

VU 176 B1+2cd

Brazil

Phrynops dahli

Dahl's Toad-headed Turtle

CR 176 B1+2c

Colombia

Phrynops hogei

Hoge's Sideneck Turtle

EN 176 B1+2c

Brazil

Phrynops zuliae

Zulia Toad-headed Turtle

VU 176 B1+2c

Venezuela

Pseudemydura umbrina

Western Swamp Turtle

CR 176 A1c, B1+2c, C1+2b, D1

Australia

Rheodytes leukops

Fitzroy River Turtle

VU 14 A1c+2c, D2 Australia

Family CHELONIIDAE

Caretta caretta

Loggerhead

EN 109 Alabd Angola?, Australia, Bahamas,

Bangladesh, Belize, Brazil, Cape Verde?, Cayman Islands, China,

Colombia, Costa Rica, Cuba,

Cyprus, Dominican Republic, Egypt, Greece, Grenada, Guadeloupe,

Guatemala, Haiti, Honduras, India?, Indonesia, Israel, Italy, Jamaica,

Japan, Libya, Madagascar, Mexico,



Montserrat, Morocco, Mozambique, Myanmar?, Namibia, New Caledonia, Nicaragua, Oman, Panama, Papua New Guinea?, Philippines, Puerto Rico, Senegal, South Africa, Sri Lanka, St Lucia, Turkey, Turks and Caicos Islands, USA, Venezuela, Virgin Islands (British) [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

# Chelonia mydas Green Turtle

EN 109 Alabd

American Samoa, Angola, Anguilla, Antigua and Barbuda, Australia, Bahamas?, Bangladesh, Belize, Benin?, Brazil, British Indian Ocean Territory, Cambodia?, Cameroon?, Cape Verde?, Chile?, China, Colombia, Comoros, Congo?, Cook Islands, Costa Rica, Côte d'Ivoire?, Cuba, Cyprus, Djibouti?, Dominica, Dominican Republic, Ecuador (Galápagos 1s), Egypt, El Salvador, Equatorial Guinea, Eritrea, Federated States of Micronesia, Fiji, French Guiana, French Polynesia, Gabon?, Ghana?, Grenada, Guadeloupe?, Guam, Guatemala, Guinea?, Guinea-Bissau?, Guyana, Haiti, Honduras?, India, Indonesia, Iran, Israel (ex?), Jamaica, Japan, Kenya, Kiribati, Kuwait, Liberia?, Madagascar, Malaysia, Maldives, Marshall Islands, Martinique, Mauritania, Mauritius (St Brandon), Mayotte, Mexico, Montserrat?, Mozambique, Myanmar, Netherlands Antilles, New Caledonia, Nicaragua, Nigeria?, Niue, Northern Marianas, Oman, Pakistan, Palau, Panama, Papua New Guinea, Peru, Philippines, Puerto Rico, Qatar?, Réunion (Europa, lles Glorieuses, Juan de Nova, Tromelin), São Tomé & Príncipe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, St Helena (Ascension), St Kitts and Nevis, St Lucia, St Vincent, Sudan?, Suriname, Taiwan?, Tanzania, Thailand, Togo?, Tokelau, Tonga, Trinidad and Tobago, Turkey, Turks and Caicos Islands, Tuvalu, US Minor Pacific Islands (Line Is), USA. United Arab Emirates. Vanuatu, Venezuela, Viet Nam,

Virgin Islands (British), Virgin Islands (US), Western Sahara?, Western Samoa?, Yemen, Zaire? [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southwest, westem central)]

#### Eretmochelys imbricata Hawksbill Turtle

CR 109 Alabd+2bcd American Samoa, Anguilla, Antigua and Barbuda, Aruba, Australia, Bahamas, Bangladesh, Barbados, Belize, Brazil, British Indian Ocean Territory, Cambodia, Cameroon?, Cape Verde?, China?, Colombia, Comoros, Cook Islands, Costa Rica, Côte d'Ivoire?, Cuba, Djibouti?, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador?, Equatorial Guinea, Eritrea, Federated States of Micronesia, Fiji, French Guiana, French Polynesia?, Gabon?, Ghana?, Grenada, Guadeloupe, Guam, Guatemala, Guinea?, Guinea-Bissau?, Guyana, Haiti, Honduras, India, Indonesia, Iran, Jamaica, Japan, Kenya, Kiribati?, Kuwait?, Madagascar, Malaysia, Maldives, Marshall Islands, Martinique, Mauritania?, Mayotte, Mexico, Montserrat, Mozambique, Myanmar, Netherlands Antilles, New Caledonia?, Nicaragua, Nigeria?, Northern Marianas?, Oman, Palau, Panama, Papua New Guinea, Philippines, Puerto Rico, Qatar, Réunion (lles Glorieuses), São Tomé & Príncipe?, Saudi Arabia, Senegal?, Seychelles, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, St Kitts and Nevis, St Lucia, St Vincent, Sudan, Suriname, Taiwan?, Tanzania, Thailand, Tokelau, Tonga?, Trinidad and Tobago, Turks and Caicos Islands, Tuvalu?, US Minor Pacific Islands?, USA, United Arab Emirates?, Vanuatu, Venezuela, Viet Nam?, Virgin Islands (British), Virgin Islands (US), Western Sahara?, Western Samoa, Yemen [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southeast,

Lepidochelys kempii Kemp's Ridley CR 109 Alab

Mexico, USA [int] [Atlantic (eastern central, northeast, northwest, western central)]

#### Lepidochelys olivacea Olive Ridley

EN 109 Alabd

Angola, Australia, Bangladesh, Brazil, Costa Rica, El Salvador, French Guiana, Guatemala, Guyana, Honduras, India, Indonesia, Kenya, Madagascar, Malaysia, Mexico, Mozambique, Myanmar, Nicaragua, Oman, Pakistan, Panama, Papua New Guinea, Peru, Senegal, South Africa, Sri Lanka, Suriname, Tanzania, Thailand, Trinidad and Tobago, Venezuela [Atlantic (eastern central, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, southeast, southwest, western central)]

# Natator depressus

Flatback

VU 109 A2cde

Australia

[Indian Ocean (eastern), Pacific (southwest, western central)]

## Family CHELYDRIDAE

Macroclemys temminckii Alligator Snapping Turtle VU 176 A1cd USA

#### Family DERMATEMYDIDAE

Dermatemys mawii

Central American River Turtle EN 176 Alabcd+2bcd, B1+2cde Belize, Guatemala, Honduras, Mexico

#### Family DERMOCHELYIDAE

#### Dermochelys coriacea Leatherback

EN 109 Alabd Angola, Anguilla, Antigua and Barbuda, Australia, Brazil, Colombia?, Costa Rica, Côte d'Ivoire, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Ghana, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, India, Indonesia, Israel (ex?), Liberia, Malaysia, Martinique, Mexico, Montserrat, Mozambique, Myanmar, Netherlands Antilles, Nicaragua, Panama, Papua New

Guinea, Peru?, Puerto Rico, Senegal,

southwest, western central)]

Solomon Islands, South Africa, Sri Lanka, St Kitts and Nevis, St Lucia, St Vincent, Suriname, Thailand, Togo, Trinidad and Tobago, USA, Venezuela?, Virgin Islands (British), Virgin Islands (US), Zaire [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

# Family EMYDIDAE

Batagur baska
River Terrapin
EN <sup>176</sup> Al bcd
Bangladesh, Cambodia?, India,
Indonesia, Malaysia, Myanmar,
Singapore?, Thailand, Viet Nam?

Callagur borneoensis
Painted Terrapin
CR <sup>176</sup> Albed
Brunei?, Indonesia, Malaysia,
Thailand

Clemmys guttata
Spotted Turtle
VU 176 A1cd+2cd
Canada, USA

Clemmys insculpta Wood Turtle VU <sup>176</sup> Alabcd+2cd Canada, USA

Clemmys marmorata
Pacific Pond Turtle
VU <sup>176</sup> Alcd
Canada (ex), Mexico, USA

Clemmys muhlenbergii Bog Turtle EN <sup>176</sup> Alcd+2cd USA

Cuora flavomarginata
Yellow-margined Box Turtle
VU <sup>176</sup> A2c
China, Japan (Nansei-shoto), Taiwan

Cuora trifasciata
Chinese Three-striped Box Turtle
EN <sup>176</sup> A2d
China, Laos?, Myanmar?, Viet Nam

Geoemyda depressa Arakan Forest Turtle CR <sup>176</sup> A2cd, B1+2c Myanmar

Geoemyda japonica Ryukyu Leaf Turtle EN <sup>176</sup> A1c, B1+2c Japan (Nansei-shoto) Geoemyda leytensis
Philippine Pond Turtle
EN <sup>176</sup> B1+2c
Philippines

Geoemyda silvatica Cochin Forest Cane Turtle EN <sup>176</sup> B1+2c India

Graptemys caglei
Cagle's Map Turtle
VU <sup>176</sup> Alc, B1+2c
USA
[R. Guadelupe-San Antonio]

Graptemys flavimaculata
Yellow-blotched Map Turtle
EN <sup>176</sup> B1+2c
USA
[R. Pascagoula]

Graptemys oculifera
Ringed Map Turtle
EN <sup>176</sup> B1+2c
USA
[R. Pearl]

Heosemys spinosa
Spiny Turtle
VU <sup>176</sup> Albd
Brunei, Indonesia, Malaysia,
Myanmar?, Thailand

Hieremys annandalii
Yellow-headed Temple Turtle
VU <sup>176</sup> Alacd+2cd
Cambodia, Malaysia?, Myanmar?,
Thailand, Viet Nam

Kachuga kachuga Red-crowned Roofed Turtle EN <sup>176</sup> A1cd Bangladesh, India, Nepal

Kachuga trivittata
Burmese Roofed Turtle
EN <sup>176</sup> Alc
Myanmar

Melanochelys tricarinata
Three-keeled Land Tortoise
VU <sup>176</sup> B1+2c
Bangladesh, India, Nepal?

Pseudemys alabamensis
Alabama Red-bellied Turtle
EN <sup>176</sup> B1+2c
USA
[Mobile Bay]

Rhinoclemmys rubida

Mexican Spotted Wood Turtle

VU 176 B1+2c

Mexico

Sacalia bealei
Beal's-eyed Turtle
VU <sup>176</sup> B1+2c
China, Hong Kong

Sacalia quadriocellata
Four-eyed Turtle
VU <sup>176</sup> B1+2c
China, Viet Nam

Terrapene coahuila
Aquatic Box Turtle
EN <sup>176</sup> Alacd, B1+2cd
Mexico
[Cuatro Cienegas basin]

Trachemys aduitrix
Carvalho's Slider
EN <sup>176</sup> B1+2c
Brazil

Trachemys decorata
Hispaniolan Slider
VU <sup>176</sup> B1+2c
Dominican Republic, Haiti

Trachemys gaigeae
Big Bend Slider
VU 176 Alc, D2
Mexico, USA

Trachemys terrapen
Jamaican Slider
VU 176 B1+2c
Bahamas [int], Jamaica

# Family KINOSTERNIDAE

Kinosternon angustipons
Narrow-bridged Mud Turtle
VU <sup>176</sup> B1+2c
Costa Rica, Nicaragua, Panama

Kinosternon dunni Dunn's Mud Turtle VU <sup>176</sup> B1+2c Colombia

Kinosternon sonoriense Sonora Mud Turtle VU <sup>176</sup> A1c Mexico, USA

Sternotherus depressus
Flattened Musk Turtle
VU <sup>176</sup> B1+2c
USA
[R. Black Warrior]

# Family PELOMEDUSIDAE

Erymnochelys madagascariensis Madagascan Big-headed Turtle EN <sup>176</sup> A1cd+2d Madagascar

Peltocephalus dumerilianus
Big-headed Amazon River Turtle
VU <sup>176</sup> Alacd
Brazil, Colombia, Ecuador, French
Guiana, Guyana?, Peru, Venezuela



Pelusios broadleyi Turkana Mud Turtle VII 176 D2

VU 1/6 D2 Kenva

[L. Turkana]

Seychelles

Pelusios seychellensis Seychelles Mud Turtle VU <sup>176</sup> D2

Podocnemis erythrocephala Red-headed River Turtle VU <sup>176</sup> Albd

Brazil, Colombia, Venezuela

Podocnemis lewyana
Magdalena River Turtle
EN <sup>176</sup> Albd
Colombia
[Rio Magdalena basin]

Podocnemis sextuberculata

Six-tubercled River Turtle VU <sup>176</sup> Alacd Brazil, Colombia, Peru

Podocnemis unifilis
Yellow-spotted River Turtle
VU <sup>176</sup> Alacd
Bolivia, Brazil, Colombia, Ecuador,
French Guiana, Guyana, Peru,
Suriname, Venezuela

#### Family TESTUDINIDAE

Geochelone chilensis
Argentine Tortoise
VU 176 Alcd
Argentina, Paraguay

Geochelone denticulata
South American Yellow-footed
Tortoise

VU <sup>176</sup> Alcd+2cd Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela

Geochelone gigantea
Aldabra Giant Tortoise
VU 176 D2

Seychelles

Geochelone nigra

Galápagos Giant Tortoise VU <sup>176</sup> A2c, B1+2c Ecuador (Galápagos Is)

Geochelone platynota
Burmese Starred Tortoise
CR <sup>176</sup> A1cd+2cd, C2a
Myanmar

Geochelone radiata
Radiated Tortoise
VU <sup>176</sup> Alacd+2cd, B1+2abc
Madagascar, Mauritius [int],
Réunion [int]

Geochelone sulcata

African Spurred Tortoise VU <sup>176</sup> A1cd Chad, Egypt?, Eritrea?, Ethiopia, Mali, Mauritania, Niger?, Nigeria, Senegal, Sudan

Geochelone yniphora Madagascar Tortoise EN <sup>176</sup> A1c, B1+2cd Madagascar

Gopherus agassizii
Desert Tortoise
VU 176 Alacde+2cde, E
Mexico, USA

Gopherus flavomarginatus
Bolson Tortoise
VU 176 Ald, B1+2bc, C1
Mexico

Gopherus polyphemus Gopher Tortoise VU <sup>176</sup> Alacde USA

Homopus bergeri
Berger's Cape Tortoise
VU 30 C2a
Namibia

Indotestudo elongata

Elongated Tortoise

VU 176 Alacd

Bangladesh, Cambodia, China, India,
Laos, Malaysia, Myanmar, Nepal,
Thailand, Viet Nam

Indotestudo forstenii Travancore Tortoise VU <sup>176</sup> Alcd India, Indonesia

Malacochersus tornieri
Pancake Tortoise
VU <sup>176</sup> Albd
Kenya, Tanzania

Manouria emys
Asian Giant Tortoise
VU <sup>176</sup> Alcd
Bangladesh, Cambodia?, China?,
India, Indonesia, Laos?, Malaysia,
Myanmar, Thailand, Viet Nam?

Manouria impressa Impressed Tortoise VU <sup>176</sup> Alacd, B1+2acd Cambodia?, China?, Laos?, Malaysia, Myanmar, Thailand, Viet Nam

Psammobates geometricus Geometric Tortoise EN <sup>176</sup> Alac, B1+2c South Africa Pyxis arachnoides
Spider Tortoise
VU <sup>176</sup> B1+2abcd
Madagascar

Testudo graeca

Pyxis planicauda

Madagascar Flat-shelled Tortoise
EN <sup>176</sup> Alcd, B1+2bcd

Madagascar

Spur-thighed Tortoise

VU 176 A1cd
Albania, Algeria, Armenia,
Azerbaijan, Bulgaria, Egypt, France
[int], Georgia, Greece, Iran, Iraq,
Israel, Italy [int], Jordan, Lebanon,
Libya, Macedonia, Moldova,
Morocco, Romania, Russia, Spain,
Syria, Tunisia, Turkey,
Turkmenistan, Ukraine, Yugoslavia

Testudo horsfieldii
Central Asian Tortoise
VU <sup>176</sup> A2d
Afghanistan, Armenia?, Azerbaijan,
China, Iran, Kazakhstan, Kyrgyzstan,
Pakistan, Russia?, Tajikistan,
Turkmenistan

Testudo kleinmanni Egyptian Tortoise EN <sup>176</sup> Alabcd Egypt, Israel, Libya

# Family TRIONYCHIDAE

Amyda cartilaginea Asiatic Softshell Turtle VU <sup>176</sup> Alcd+2cd Brunei, Indonesia, Laos, Malaysia, Myanmar, Thailand, Viet Nam

Apalone ater
Cuatro Cienegas Softshell
CR <sup>176</sup> Alace, B1+2c
Mexico

Aspideretes nigricans
Black Soft-shell Turtle
CR <sup>176</sup> B1+2a
Bangladesh

Chitra chitra
Striped Narrow-headed Softshell
Turtle
CR <sup>176</sup> A1cd, B1+2c
Thailand

[R. Mae Khlong]

Chitra indica

Narrow-headed Softshell Turtle

VU 176 Alcd

Bangladesh, India, Myanmar, Pakistan [R. Indus] Nilssonia formosa

Burmese Peacock Softshell VU 176 A1acd+2cd, B1+2c Myanmar, Thailand?

Pelochelys bibroni

Asian Giant Softshell Turtle

VU 176 A1cd

Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand, Viet Nam

Pelochelys cantorii

Cantor's Giant Softshell VU 176 A1cd+2cd

Indonesia, Papua New Guinea

Rafetus euphraticus **Euphrates Softshell Turtle** EN 65 A1ac+2c

Iran, Iraq, Syria, Turkey

#### Class AMPHIBIA

#### Order ANURA

#### Family BUFONIDAE

Bufo amatolica Amatola Toad

VU 185 A2ce South Africa

Bufo boreas

EN 185 Alce Canada, Mexico, USA

Bufo canorus

Yosemite Toad

EN 185 A1a, B2be+3b USA

Bufo exsul

Black Toad

VU 75 D2

USA

Bufo houstonensis

Houston Toad

EN 75 C2a

USA

Bufo nelsoni

Amargosa Toad EN 185 Alace, B1+2abcd

USA

Bufo periglenes

Golden Toad

CR 185 B1+2ce+3b

Costa Rica

Nectophrynoides occidentalis

Mt Nimba Viviparous Toad

EN 185 B1+2c

Côte d'Ivoire, Guinea, Liberia?

Pedostibes kempi

Garo Hill Tree Toad

VU 185 D2

India

Pedostibes tuberculosus

Malabar Tree Toad

VU 185 B1+2c

India

Peltophryne lemur

Puerto Rican Crested Toad

VU 185 Alace, B2c+3b

Puerto Rico, Virgin Islands (British)

#### Family DISCOGLOSSIDAE

Alytes dickhilleni

VU 65 B1+2cd

Spain

Alytes muletensis

Ferreret

CR 65 B1+2bc

Spain (Balearic Is)

Discoglossus montalentii

VU 65 A2c, B2c+3d, C2a

France

#### Family HELEOPHRYNIDAE

Heleophryne hewitti

Hewitt's Ghost Frog

EN 185 B1+2abc South Africa

Heleophryne rosei

Table Mountain Ghost Frog

VU 185 A1ce+2ce, B1+2abc, D2

South Africa

## Family HYLIDAE

Hyla vasta

VU 185 A1c

Dominican Republic, Haiti

Litoria flavipunctata

Yellow-spotted Tree Frog

CR 14 Alac

Australia

Litoria lorica

Amoured Frog

CR 14 Alc

Australia

Litoria nannotis

Torrent Tree Frog

EN 14 Alc

Australia

Litoria nyakalensis

Nyakala Frog

CR 14 Alc

Australia

Litoria pearsoniana

Pearson's Frog

VU 14 Alac

Australia

Litoria piperata

Peppered Tree Frog CR 14 Alac

Australia

Litoria raniformis

Southern Bell Frog

EN 14 Alac Australia

Litoria rheocola

Common Mistfrog

EN 14 Alac Australia

Litoria spenceri

Spotted Frog VU 14 Alac

Australia

Nyctimystes dayi

Australian Lace-lid

EN 14 Alac

Australia

# Family HYPEROLIIDAE

Hyperolius pickersgilli Pickersgill's Reed Frog

VU 185 B1+2abc

South Africa

Leptopelis xenodactylus

Long-toed Tree Frog

VU 185 A2c South Africa

Tachycnemis seychellensis

Seychelle Islands Tree Frog

VU 185 D2

Seychelles

#### Family LEIOPELMATIDAE

Leiopelma hamiltoni Hamilton's Frog

VU 14 D2

New Zealand

## Family LEPTODACTYLIDAE

Atelognathus grandisonae

VU 185 D2 Chile

Atelognathus nitoi

VU 185 D2

Argentina

[Laguna Verde]

Atelognathus reverberii

VU 185 B1+2c+3b

Argentina

Atelognathus solitarius

VU 185 D2

Argentina

[Las Bayas stream]

Batrachophrynus macrostomus

Lake Junin Frog VU 185 A2cde

Peru

[L. Junin]

Eleutherodactylus cavernicola

VU 185 D2 Iamaica

Eleutherodactylus cooki

VU 185 D2

Puerto Rico

Eleutherodactylus fuscus

VU 185 B1+2c

Jamaica

Eleutherodactylus junori

VU 185 B1+2c

Eleutherodactylus karlschmidtii

CR 185 Alae

Puerto Rico

Eleutherodactylus sisyphodemus

VU 185 D2 Jamaica

Eupsophus migueli

VU 185 D2

Chile

Holoaden bradei

CR 80 Ala

Brazil

Hylodes sazimai

VU 185 A2c

Brazil

Insuetophrymus acarpicus

VU 185 D2 Chile

Paratelmatobius lutzii

CR 80 Ala

Brazil

Somuncuria somuncurensis

Somuncura Frog EN 185 B1+2bc

Argentina

Telmatobius atacamensis

EN 185 Ale Argentina

Thoropa lutzi

CR 80 Ala

Brazil

Thoropa petropolitana

CR 80 Ala

**Brazil** 

Family MICROHYLIDAE

Breviceps gibbosus

Cape Rain Frog

VU 185 A2c

South Africa

Breviceps macrops

Desert Rain Frog

VU 185 A2c

Namibia?, South Africa

Dyscophus antongilii

VU 106 A1cd

Madagascar

Melanobatrachus indicus

Black Microhylid

EN 185 B1+2c

India

Family MYOBATRACHIDAE

Geocrinia alba

White-bellied Frog

EN 14 B1+2c

Australia

Geocrinia vitellina

Yellow-bellied Frog

VU 14 D2

Australia

Mixaphyes balbus

Stuttering Frog

VU 14 Alc

Australia

Mixaphyes fleayi

Fleay's Frog

EN 14 Alac

Australia

Mixaphyes iteratus

Southern Barred Frog

EN 14 Alac

Australia

Philoria frosti

Baw-baw Frog

EN 14 Ala

Australia

Pseudophryne carrabaree

Corroboree Frog EN 14 Alac

Australia

Rheobatrachus silus Gastric Brooding Frog

CR 14 Alac

Australia

Rheobatrachus vitellinus

Southern Gastric Breeding Frog

EN 14 B1+2be

Australia

Taudactylus acutirostris

Sharp-nosed Torrent Frog

CR 14 Alc

Australia

Taudactylus diurnus

Mt Glorius Torrent Frog

CR 14 D1

Australia

Taudactylus eungellensis

Eungella Torrent Frog

VU 14 B1+2e

Australia

Taudactylus liemi

Liem's Frog

VU 14 B1+2e

Australia

Taudactylus pleione

Pleione's Torrent Frog

VU 14 B1+2e

Australia

Taudactylus rheaphilus

Tinkling Frog

CR 14 Alac

Australia

Family PIPIDAE

Xenopus gilli

Cape Platanna

VU 185 A1ce+2ce, B1+2abc+3b

South Africa

Family RANIDAE

Conraua goliath

Goliath Frog

VU 185 B1+2c

Cameroon, Equatorial Guinea

Mantella aurantiaca

VU 106 Alcd

Madagascar

Microbatrachella capensis

Micro Frog

EN 185 A1ce+2ce, B2abc+3b

South Africa

Platymantis insulatus

VU 185 D2

Philippines

Platymantis spelaeus

VU 185 D2

**Philippines** 

Platymantis vitiensis

Fijian Ground Frog

EN 14 B1+2c Fiii

Rana cascadae

VU 185 Ala

USA

Rana holsti

Holst's Frog VU 185 B1+2c

Japan (Nansei-shoto)

Rana holtzi EN 65 B1+2bc+3d, E

Turkey

Rana ishikawae

Ishikawa's Frog

VU 185 B1+2c

Japan (Nansei-shoto)

Rana muscosa

VU 185 A1a USA

Rana namivei

Namive's Frog

VU 185 B1+2c

Japan (Nansei-shoto)

Rana onca

Relict Leopard Frog

VU 185 Alac, B1+2ade

Rana subaspera

Otton Frog

VU 185 B1+2c

Japan (Nansei-shoto)

## Family SOOGLOSSIDAE

Nesomantis thomasseti

Thomasset's Seychelles Frog

EN 185 B1+2c

Seychelles

Sooglossus gardineri

Gardiner's Seychelles Frog

VU 185 D2

Seychelles

Sooglossus sechellensis

Seychelles Frog

VU 185 D2 Seychelles

#### Order CAUDATA

### Family AMBYSTOMATIDAE

Ambystoma californiense

VU 185 A2c

USA

Ambystoma cingulatum

VU 185 A1c

USA

Ambystoma lermaense

Lake Lerma Salamander

CR 185 B1+2c

Mexico

[L. Lerma]

Ambystoma mexicanum

Axolotl VU 185 D2

Mexico

[L. Xochimilco]

#### Family CRYPTOBRANCHIDAE

Andrias japonicus

Japanese Giant Salamander

VU 185 B1+2cd

Japan

#### Family HYNOBIIDAE

Batrachuperus gorganensis

VU 103 D2

lran

Batrachuperus mustersi

EN 185 B1+2bc

Afghanistan

Batrachuperus persicus

VU 103 D2

Iran

Hynobius abei

Abe's Salamander

EN 185 B1+2c

Japan

Hynobius dunni

Oita Salamander

VU 185 Alac

Japan

Hynobius hidamontanus

Hakuba Salamander

VU 185 A2c

Japan

Hynobius okiensis

Oki Salamander

EN 185 B1+2c

Japan

Hynobius takedai

Hokuriku Salamander

EN 185 B1+2c

Japan

Ranodon sibiricus

Semirechensk Salamander

VU 103 A1d+2d

China, Kazakhstan

#### Family PLETHODONTIDAE

Batrachoseps aridus

Desert Slender Salamander

CR 15 A2cd

USA

Batrachoseps campi

EN 185 B1+2a

USA

Batrachoseps simatus

Kern Canyon Slender Salamander

VU 75 D2

USA

Batrachoseps stebbinsi

Tehachapi Slender Salamander VU 75 D2

USA

Eurycea nana

San Marcos Salamander

VU 75 D2

USA

Eurycea tridentifera

VU 185 D2

**USA** 

Hydromantes brunus

Limestone Salamander

VU 75 D2

USA

Hydromantes shastae

Shasta Salamander

VU 75 D2

USA

Phaeognathus hubrichti

Red Hills Salamander EN 15 B1+2c

USA

Plethodon hubrichti

VU 185 D2

USA

Plethodon neomexicanus

Jemez Mountains Salamander

EN 75 B1+2c

USA

Plethodon nettingi

Cheat Mountain Salamander

VU 75 D2

USA

Plethodon shenandoah

Shenandoah Salamander

EN 114 B1+2c

USA

Plethodon stormi

Siskiyou Mts Salamander

VU 75 D2

USA

Speleomantes flavus

VU 65 C2b, D2

Italy

Typhlomolge rathbuni

Texas Blind Salamander

VU 185 D2 USA

Family PROTEIDAE

Proteus anguinus

VU 65 B1+2bc, C2a

Bosnia and Herzegovina, Croatia, France [int], Italy, Slovenia

# Family SALAMANDRIDAE

Chioglossa lusitanica

Gold-striped Salamander

VU 65 A2c

Portugal, Spain Euproctus platycephalus

Sardinian Brook Salamander

CR 65 A1ac, B1+2bcd Italy

Mertensiella luschani

Lycian Salamander

VU 65 B1+2cde Greece, Turkey

Paramesotriton deloustali

Vietnamese Salamander

VU 185 D2

Viet Nam



Salamandra lanzai Large Alpine Salamander VU <sup>65</sup> C2a Italy

The following four Classes include fishes. Most species listed are non-marine. The marine fish listings below represent the first attempt to interpret the conservation status of marine fishes according to the new IUCN Red List criteria. These criteria require further evaluation in order to assess how well they reflect extinction risk in marine fishes.

# Class

### CEPHALASPIDOMORPHI

# Order

# PETROMYZONTIFORMES

# Family PETROMYZONTIDAE

Eudontomyzon hellenicus Greek Brook Lamprey VU <sup>185</sup> A2ce, B1+2c Greece

Lethenteron zanandreai Lombardy Brook Lamprey EN <sup>185</sup> B1+2c Croatia?, Italy, Slovenia

Mordacia praecox
Non-parasitic Lamprey
VU <sup>179</sup> D2
Australia

#### Class ELASMOBRANCHII

#### Order HEXANCHIFORMES

#### Family HEXANCHIDAE

Hexanchus griseus
Bluntnose Sixgill Shark
VU 47 A1d+2d

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southeast, southeast,

#### Order LAMNIFORMES

#### Family ODONTASPIDIDAE

Carcharias taurus
Sand tiger Shark
EN 116 Alab+2d
[Atlantic (eastern central, northwest, southeast, southwest, western

central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (northwest, southwest, western central)]

#### Family LAMNIDAE

#### Carcharodon carcharias Great White Shark

VU <sup>68</sup> A1bcd+2cd [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

#### Lamna nasus Porbeagle

VU 69 A1bd+2d

[Atlantic (eastern central, northeast, northwest, southeast, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea, Pacific (southeast, southwest)]

#### Family CETORHINIDAE

#### Cetorhinus maximus Basking Shark

VU 68 Alad+2d

[Atlantic (eastern central, eastern central, northeast, northwest, southwest, southeast, southwest), Indian Ocean (eastern), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest)]

#### Order CARCHARINIFORMES

# Family CARCHARHINIDAE

# Carcharhinus limbatus Blacktin Shark

Blacktip Shark VU 69 A1bd+2d

[Atlantic (eastern central, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southeast, western central)]

#### Carcharhinus obscurus Dusky Shark

EN 116 A1d+2d

[Atlantic (eastern central, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black

Sea, Pacific (eastern central, northwest, southeast, southwest, western central)]

# Carcharhinus plumbeus

Sandbar Shark

VU 69 A1bd+2d

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, western central)]

# Glyphis gangeticus

Ganges Shark

CR <sup>46</sup> Albede+2cde, C2b India, Pakistan? [R. Ganges (R. Hooghly)]

## Order SQUALIFORMES

### Family SQUALIDAE

Dalatias licha Kitefin Shark

VU 47 A1d+2d

[Atlantic (eastern central, northeast, northwest, southeast, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southwest, western central)]

# Order PRISTIFORMES

#### Family PRISTIDAE

Pristis microdon

Freshwater Sawfish

EN <sup>68</sup> Albcd+2cd Australia, India, Indonesia, Papua New Guinea, South Africa, Thailand [Indian Ocean (eastern), Pacific (western central)]

#### Pristis pectinata Smalltooth Sawfish

EN 68 A1bcd+2cd [Atlantic (southwest, western central), Indian Ocean (eastern,

#### Pristis perotteti

western)]

Largetooth Sawfish

EN <sup>68</sup> Albcd+2cd
Brazil, Colombia, El Salvador,
Gambia, Guinea-Bissau, Guatemala,
Honduras, Mali, Nicaragua, Panama,
Senegal
[Atlantic (northeast, western central,
eastern central, southwest),

eastern central, southwest), Mediterranean and Black Sea, Pacific (eastern central, southeast)] Pristis pristis

Common Sawfish

EN 68 Albcd+2cd

[Atlantic (eastern central, northeast, southeast), Mediterranean and Black Sea]

#### Order MYLIOBATIFORMES

#### Family DASYATIDAE

Himantura chaophraya

Giant Freshwater Stingray

EN 47 Albcde+2cde

Australia, Indonesia, Papua New Guinea, Thailand

[R. Fly, R. Mahakam]

# Class ACTINOPTERYGII

## Order ACIPENSERIFORMES

# Family ACIPENSERIDAE

Acipenser baerii

Siberian Sturgeon

VU 170 A2d

Russia

Acipenser brevirastrum

Shortnose Sturgeon

VU 170 Alc, B1+2cd

Canada, USA

Acipenser dabryanus

Yangtze Sturgeon

CR 170 Alacd+2cd

China

[R. Yangtze]

Acipenser fulvescens

Lake Sturgeon

VU 170 Alad+2d

Canada, USA

Acipenser guldenstaedti

Russian Sturgeon

EN 170 A2d

Azerbaijan, Bulgaria, Hungary, Iran,

Kazakhstan, Moldova, Romania,

Russia, Turkey?, Turkmenistan,

Ukraine, Yugoslavia

Acipenser medirostris

Green Sturgeon

VU 170 Alac

Canada, USA

Acipenser mikadoi

Sakhalin Sturgeon

EN 170 C1

Japan, Russia

Acipenser naccarii

Adriatic Sturgeon

VU 170 Alac

Albania (ex), Croatia, Italy,

Yugoslavia (ex)

[R. Po]

[L. Skadar]

Acipenser nudiventris

Ship Sturgeon

EN 170 Alacde+2d

Azerbaijan, Bulgaria, Hungary, Iran, Kazakhstan (ex), Moldova, Romania,

Russia, Ukraine, Uzbekistan (ex)

[R. Danube]

Acipenser persicus

Persian Sturgeon

EN 170 A2d

Azerbaijan, Georgia, Iran, Russia,

Turkey

Acipenser ruthenus

Sterlet

VU 170 Alc

Austria, Bosnia and Herzegovina, Czech Republic, Germany, Hungary,

Kazakhstan (ex?), Latvia, Lithuania,

Romania, Russia, Slovakia, Switzerland, Ukraine, Yugoslavia

Acipenser schrencki

Amur Sturgeon

EN 170 A2d

China, Russia

[R. Amur]

Acipenser sinensis

Chinese Sturgeon

EN 170 A2cd

China

[R. Pearl, R. Yangtze]

Acipenser stellatus

Stellate Sturgeon

EN 170 A2d

Azerbaijan, Bulgaria, Georgia,

Hungary, Iran, Kazakhstan, Moldova, Romania, Russia,

Turkmenistan, Ukraine, Yugoslavia

Acipenser sturio

Common Sturgeon

CR 170 A2d, D1

Albania, Algeria (ex?), Belgium

(ex?), Estonia (ex?), Finland (ex?),

France, Georgia, Germany (ex?), Greece (ex?), Hungary (ex?), Ireland

(ex?), Italy (ex?), Morocco (ex?), Netherlands, Norway (ex?), Poland (ex?), Portugal (ex?), Romania (ex?),

Russia (ex?), Spain, Sweden (ex?), Switzerland (ex?), Turkey, Ukraine

(ex?), United Kingdom, Yugoslavia (ex?)

Huso dauricus

Kaluga

EN 170 Alacde+2d

China, Russia

[R. Amur]

Huso huso

Beluga

EN 170 A2d

Azerbaijan, Bulgaria, Hungary, Iran, Italy (ex), Kazakhstan, Moldova,

Romania, Russia, Turkmenistan,

Ukraine, Yugoslavia

Pseudoscaphirhynchus fedtschenkoi Syr-Dar Shovelnose Sturgeon

CR 170 Alae, Dl

Kazakhstan

[R. Syr Darya]

Pseudoscaphirhynchus hermanni

Small Amu-Dar Shovelnose Sturgeon

CR 170 Alae, Dl

Turkmenistan, Uzbekistan

[R. Amu Darya]

Pseudoscaphirhynchus kaufmanni

Large Amu-Dar Shovelnose Sturgeon

EN 170 Alacd

Tajikistan, Turkmenistan, Uzbekistan

[R. Amu Darya]
Scaphirhynchus albus

Pallid Sturgeon

EN 170 D1

USA

[R. Missouri-Mississippi]

Scaphirhynchus platorynchus

Shovelnose Sturgeon

VU 170 Alacd+2d

[R. Missouri-Mississippi]

Scaphirhynchus suttkusi

Alabama Sturgeon

CR 170 Alc+2cd, Dl, E

USA

[Mobile Bay]

# Family POLYODONTIDAE

Polyodon spathula Paddlefish

VU 170 C2b

USA

[R. Mississippi]

Psephurus gladius Chinese Paddlefish

CR 170 A2cd

China

[R. Yangtze]

# Order OSTEOGLOSSIFORMES

#### Family OSTEOGLOSSIDAE

Scleropages formosus

Asian Bonytongue

EN 101 Alcd+2cd

Brunei, Cambodia, Indonesia,

Malaysia, Philippines, Singapore,

Thailand, Viet Nam



#### Order CLUPEIFORMES

#### Family CLUPEIDAE

Alosa alabamae Alabama Shad EN 91 B1+2e

USA

Alosa macedonia

Liparia
VU 101 D2
Greece
[L. Volvi]

Jenkinsia parvula Venezuelan Herring

VU D2
Venezuela
[Atlantic (western central)]

Tenualosa thibaudeaui

EN 101 A1a

Cambodia, Laos, Thailand, Viet Nam

#### Order CYPRINIFORMES

#### Family CYPRINIDAE

Acheilognathus elongatus EN 101 B1+2c

China
[L. Dianchi]

Acheilognathus longipinnis Itasenpara Bitterling

VU 101 Alace, B1+2c Japan

Alburnus akili Gokce Baligi VU 185 A2de

Turkey

Alburnus albidus
Italian Bleak
VU 185 Alace

Croatia, Italy, Turkey?

Anabarilius polylepis

EN 101 B1+2c China

[L. Dianchi]

Anaecypris hispanica EN 185 Alace, B1+2c

Portugal, Spain

Aulopyge hugeli
Dalmatian Barbel-gudgeon
VU 185 Alacde+2ce

Bosnia and Herzegovina?, Croatia

Balantiocheilos melanopterus Silver Shark

EN 101 A1ac Indonesia, Malaysia, Thailand

Barbopsis devecchi VU <sup>185</sup> D2 Somalia Barbus andrewi

Cape Whitefish VU 158 A1cde South Africa

Barbus brevipinnis

Shortfin Barb VU 158 A1c

Mozambique, South Africa

Barbus calidus
Clanwilliam Redfin
EN 158 B1+2ac
South Africa

Barbus capensis
Clanwilliam Yellowfish
VU 158 Alce

Barbus comizo Iberian Barbel VU 185 A2ce

South Africa

Portugal, Spain

Barbus erubescens

Twee River Redfin

CR 158 B2ae+3a, E South Africa Barbus euboicus

Petropsaro CR <sup>185</sup> A2c, B2c+3a Greece [Manikiotiko Stream]

Barbus guiraonis Barbo Mediterraneo VU <sup>185</sup> A2ce Spain

Barbus haasi Barbo de Cola Roja VU <sup>185</sup> A2ce Spain

Barbus kimberleyensis Largemouth Yellowfish VU 158 A1c

South Africa

Barbus microcephalus VU <sup>185</sup> A2ce Portugal, Spain

Barbus motebensis Marico Barb VU 158 A1c South Africa

Barbus prespensis Briána

Barbus serra

VU 185 A2c Albania, Greece, Macedonia?

Sawfin EN <sup>158</sup> B1+2abde, C1 South Africa Barbus steindachneri

VU 185 A2ce Portugal [R. Guadiana] Barbus trevelyani

Border Barb
CR 158 A1e
South Africa

Caecobarbus geertsi
African Blind Barb Fish
VU 185 A1e, B1+2e, D2
Zaire

Caecocypris basimi VU 185 D2 Iraq

Cephalakompsus pachycheilus CR <sup>185</sup> Alce Philippines [L. Lanao]

Chela caeruleostigmata CR 101 A1c Cambodia, Thailand

Chondrostoma holmwoodii VU <sup>185</sup> A2e Turkey

Chondrostoma lusitanicum
Boga-Portuguesa
VU 185 A2ce
Portugal

Chondrostoma scodrensis
CR <sup>185</sup> A1a, B1+2e
Albania, Yugoslavia
[L. Skadar]

Cyprinella alvarezdelvillari CR <sup>49</sup> A1ace, B1+2c, C2b Mexico

Cyprinella bocagrande Sardinita Bocagrande CR <sup>49</sup> A2e, C2b Mexico

Cyprinella caerulea
Blue Shiner
VU 75 B1+2ac
USA

Cyprinella formosa Beautiful Shiner VU 75 B2c+3c Mexico, USA

Cyprinella panarcys
Conchos Shiner
EN 49 A1ace, E
Mexico

Cyprinella proserpina
Proserpine Shiner
VU 49 B1+2c, D2
Mexico, USA
[Rio San Carlos]

USA

[R. Alvord]

Labeo seeberi Gila cypha Cyprinella santamariae Clanwilliam Sandfish Humpback Chub Sardinita de Santa Maria CR 158 Alace VU 49 A1c+2c, B1+2c, C2b, D2 VU 75 D2 South Africa USA Mexico [R. Colorado] Ladigesocypris ghigii Cyprinella xanthicara Cuatro Cienegas Shiner Gila ditaenia Ghizáni VU 185 A2ce EN 49 A2ce Charalito Sonorense VU 49 A2ce, D2 Greece, Turkey Mexico Mexico, USA Lepidomeda albivallis Cyprinus micristius White River Spinedace EN 185 B1+2c Gila elegans CR 75 Albce China Bonytail Chub EN 75 B1+2ac USA [L. Dianchi] [R. White] Mexico, USA Danio pathirana Barred Danio Gila modesta Lepidomeda vittata CR 134 B1+2c Charalito Saltillo Little Colorado Spinedace VU 75 D2 CR 49 Alace+2ce, B1+2ab Sri Lanka USA Mexico Dionda diaboli [R. Little Colorado] Devil's River Minnow Gila nigrescens VU 49 Alae+2e Leuciscus illyricus Charalito Chihuahua VU 185 Alce+2ce Mexico, USA CR 49 Alace+2ce, Bl+2abc Croatia Mexico, USA Dionda dichroma [R. Cetina] Sardinita de Rio Verde Gila purpurea VU 49 A1ac+2c, D2 Yaqui Chub Leuciscus keadicus VU 49 A2ce, B1+2abd, D2 VU 185 D2 Mexico Mexico, USA Greece Dionda mandibularis [R. Evrotas] Sardinita Quijarrona Gobio hettitorum CR 49 A2ce, B1+2abc, C2a Leuciscus microlepis Dere Kayasi VU 185 A1ace, D2 VU 185 D2 Mexico Croatia Turkey Eremichthys acros [Gökdere Stream] Desert Dace Leuciscus polylepis VU 75 D2 EN 185 B2c+3a Hampala lopezi USA CR 101 A1a, B1+2a Croatia [R. Cikola] Philippines Erimystax cahni Slender Chub Leuciscus svallize Hybognathus amarus VU 75 B1+2ac Rio Grande Minnow VU 185 A2ce, D2 USA EN 75 B1+2acd Croatia **USA** Garra barreimiae Leuciscus ukliva [Rio Grande] VU 185 D2 CR 185 Alace, B1+2abce Oman, United Arab Emirates Iberocypris palaciosi Croatia EN 101 B1+2c [R. Cetina] Garra dunsirei VU 185 D2 Spain Lythrurus snelsoni [R. Guadalquivir] Oman Ouachita Mountain Shiner VU 75 D2 Iotichthys phlegethontis Garra longipinnis Least Chub VU 185 D2 USA VU 75 B1+2ac Oman Macrhybopsis gelida USA Sturgeon Chub Gibbibarbus cyphotergous [R. Bonneville] VU 75 A1c+2c VU 101 D2 Iranocypris typhlops USA China VU 185 D2 Gila alvordensis Mandibularca resinus 1ran Alvord Chub Bagangan CR 185 A1ce Labeo fisheri VU 75 D2 Green Labeo Philippines USA EN 134 B1+2c, C2a [L. Lanao] Gila boraxobius Sri Lanka Borax Lake Chub Meda fulgida VII 75 D2 Labeo lankae Spikedace

VU 75 D2

USA

CR 134 A1c+2c, C1

Sri Lanka



Moapa coriacea Ospatulus truncatus Probarbus jullieni Moapa Dace Bitungu Ikan Temoleh CR 75 B1+2c CR 185 Alce EN 101 Alac Cambodia, Laos, Malaysia, Thailand, USA **Philippines** [R. Muddy] [L. Lanao] Viet Nam Neolissochilus theinemanni Paraphoxinus alepidotus Pseudobarbus asper VU 185 D2 VU 185 A2ce Smallscale Redfin Indonesia Croatia VU 158 Alce [L. Toba] South Africa Paraphoxinus croaticus Notropis aguirrepequenoi VU 185 A2ce Pseudobarbus burchelli Sardinita del Pilon Croatia Burchell's Redfin VU 49 Alace+2ce, B1+2ab, D2 EN 158 A1ce+2ce, C1 Paraphoxinus ghetaldi Mexico VU 185 A2ce South Africa Notropis buccula Croatia Pseudobarbus burgi Smalleye Shiner [R. Buna] VU 75 D2 Berg River Redfin Paraphoxinus metohiensis CR 158 A1ce, B1+2abce+3acd USA VU 185 A2ce South Africa [R. Brazos] Croatia Notropis cahabae Pseudobarbus phlegethon Phenacobius teretulus Cahaba Shiner Fiery Redfin Kanawha Minnow CR 75 B1+2cd EN 158 B1+2ac VU 75 D2 **USA** South Africa USA [R. Cahaba] Pseudobarbus quathlambae [R. New] Notropis imeldae Maluti Minnow Phoxinellus anatolicus Sardinita de Rio Verde CR 158 B1+2abcd Yag Baligi VU 49 C2b, D2 Lesotho EN 185 A2e Mexico Turkey Pseudobarbus tenuis Notropis mekistocholas [L. Akgol, L. Beysehir] Slender Redfin Cape Fear Shiner EN 158 A1ce+2ce, C1 Phoxinellus egridiri CR 75 B1+2cd South Africa Yag Baligi USA CR 185 Ale Pseudophoxinus beoticus Notropis melanostomus Turkey Paskóviza Blackmouth Shiner [L. Egirdir] EN 185 A2ce VU 75 D2 Phoxinellus handlirschi Greece USA Cicek Notropis moralesi Ptychocheilus lucius **ČR** 185 Ale Sardinita de Tepelmene Colorado Squawfish Turkey CR 49 C2b VU 75 D2 [L. Egirdir] Mexico USA Phoxinus cumberlandensis [R. Colorado] Notropis simus Mountain Blackside Dace Bluntnose Shiner Puntius amarus VU 75 D2 EN 75 A1c Pait USA Mexico, USA CR 185 A1ce Phreatichthys andruzzi [Rio Grande] Philippines VU 185 D2 Onychostoma alticorps [L. Lanao] Somalia EN 101 Alacde Puntius bandula Plagopterus argentissimus Taiwan CR 134 B1+2c, C1 Woundfin Opsaridium peringueyi Sri Lanka VU 75 D2 Dwarf Sanjika USA Puntius baoulan VU 158 B1+2abc, D2 [R. Virgin] Baolan South Africa CR 185 Alce Pogonichthys macrolepidotus Oregonichthys crameri Philippines Sacramento Splittail Oregon Chub [L. Lanao] EN 75 A1c VU 75 D2 USA Puntius clemensi Poropuntius tawarensis Bagangan Ospatulus palaemophagus CR 185 Aice VU 185 D2 EN 185 Alce

Indonesia

[L. Tawar]

Philippines

[L. Lanao]

**Philippines** 

[L. Lanao]

Tras

CR 185 A1ce

Philippines

IL. Lanaol

Spratellicypris palata Puntius tumba Puntius disa Tumba Palata Disa VU 185 A2cde CR 185 Alce CR 185 A1ce Philippines Philippines Philippines [L. Lanao] [L. Lanao] [L. Lanao] Rasbora baliensis Tanakia tanago Puntius flavifuscus Tokyo Bitterling VU 185 D2 Katapa-tapa VU 101 Alac, B1+2c Indonesia CR 185 Alce [L. Bratan] Japan Philippines Rasbora tawarensis [L. Lanao] Tor yunnanensis VU 185 D2 EN 185 A1ac, B1+2e Puntius hemictenus Indonesia China VU 101 D2 [L. Tawar] [L. Fuxian] Philippines Rasbora wilpita Typhlobarbus nudiventris EN 134 B1+2c Puntius herrei VU 101 D2 CR 185 Alce Sri Lanka China Philippines Relictus solitarius Typhlogarra widdowsoni Relict Dace Puntius katalo VU 185 D2 EN 75 B1+2c Katolo Iraq USA CR 185 A1ce Vimba melanops Rhinichthys cobitis Philippines Malamída Loach Minnow [L. Lanao] VU 185 Alce VU 75 D2 Puntius lanaoensis Greece, Macedonia? USA Kandar Family COBITIDAE Rutilus lemmingii CR 185 A1ce VU 185 A2ce **Philippines** Botia sidthimunki Portugal?, Spain [L. Lanao] CR 101 Alc Rutilus macrolepidotus Laos, Thailand? Puntius lindog Ruivaco Cobitis calderoni Lindog VU 185 A2ce VU 185 A2cde VU 185 Alace+2ce Portugal Portugal, Spain Philippines Rutilus meidingeri [L. Lanao] Lepidocephalichthys jonklaasi EN 101 B1+2c Spotted Loach Puntius manalak Austria, Germany, Slovakia EN 134 B1+2c, C1 Manalak [R. Danube] CR 185 A1ce Sri Lanka Scardinius graecus Philippines Protocobitis typhlops Greek Rudd [L. Lanao] VU 101 D2 VU 185 D2 China Greece Puntius manguaoensis VU 101 D2 Schizothorax lepidothorax Family BALITORIDAE EN 185 Alac, B1+2e Philippines China Hemimyzon taitungensis Puntius martenstyni VU 101 D2 [L. Fuxian] EN 134 B1+2c Taiwan Sinocyclocheilus anatirostris Sri Lanka Homaloptera thamicola VU 101 D2 VU 101 D2 Puntius sirang China Thailand Sirang Sinocyclocheilus angularis VU 185 A2cde VU 101 D2 Nemacheilus smithi Philippines VU 185 D2 [L. Lanao] Iran Sinocyclocheilus anophthalmus VU 101 D2 [Baq-e-Loveh pool] Puntius speleops VU 101 D2 China Nemacheilus troglocataractus Thailand VU 101 D2 Sinocyclocheilus hyalinus VU 101 D2 Thailand Puntius tras

Sinocyclocheilus microphthalmus

Nemacheilus tschaiyssuensis

VU 185 D2

[Caysuyu stream]

Turkey

China

China

VU 101 D2



Oreonectes anophthalmus

VU 101 D2

China

Schistura jarutanini

VU 101 D2

Thailand

Schistura oedipus

VU 101 D2

Thailand

Schistura sijuensis

VU 101 D2

India

Sinogastromyzon puliensis

VU 101 D2

Taiwan

Sphaerophysa dianchiensis

VU 101 D2

China

Sundoreonectes tiomanensis

VU 101 D2

Malaysia

Triplophysa gejiuensis

VU 101 D2

China

Triplophysa xiangxensis

VU 101 D2

China

Yunnanilus macrogaster

VU 101 D2

China

Yunnanilus niger

VU 101 D2

China

Yunnanilus nigromaculatus

EN 101 B1+2abc

China

[L. Dianchi]

Family CATOSTOMIDAE

Catostomus bernardini

Yaqui Sucker

VU 49 Alae+2e

Mexico, USA

Catostomus cahita
Matalote Cahita

VU 49 A1a, B1+2ac

Mexico

Catostomus conchos

Matalote Conchos

VU 49 Alab, B1+2ac

Mexico

Catostomus leopoldi

Matalote del Bavispe

VU 49 A1c, B1+2ac

Mexico

Catostomus microps

Modoc Sucker

EN 75 B1+2c, C1

USA

Catostomus santaanae

Santa Ana Sucker

VU 75 B1+2c, D2

USA

Catostomus warnerensis

Warner Sucker

VU 75 D2

USA

[L. Warner basin]

Catostomus wigginsi

Matalote Opata

VU 49 B1+2abc, D2

Mexico

Chasmistes brevirostris

Shortnose Sucker

EN 75 B1+2c

**USA** 

Chasmistes cujus

Cui-ui

CR 75 B1+2b

USA

[L. Pyramid]

Deltistes luxatus

Lost River Sucker

EN 75 B1+2cd

USA

Moxostoma hubbsi

Copper Redhorse

VU 75 D2

Canada

Xyrauchen texanus

Razorback Sucker

EN 75 Albc

USA

Order CHARACIFORMES

Family CHARACIDAE

Gymnocharacinus bergi

Naked Characin

EN 185 A2ce, B1+2c

Argentina

Order SILURIFORMES

Family DIPLOMYSTIDAE

Diplomystes chilensis

Tollo de Agua Dulce

EN 185 B1+2c

Chile

Family ICTALURIDAE

Ictalurus mexicanus

Bagre de Rio Verde VU 49 A1ac+2c

Mexico

Ictalurus pricei

Bagre de Yaqui

VU 49 Alac+2c, B1+2abc

Mexico

Noturus baileyi

Smoky Madtom

CR 75 B1+2c

USA

[R. Little Tenessee]

Noturus flavipinnis

Yellowfin Madtom

VU 75 D2

USA

Noturus gilberti

Orangefin Madtom

VU 75 D2 USA

Noturus lachneri

Ouachita Madtom

VU 75 B1+2cd USA

Noturus stanauli

ivoiurus sianai

Pygmy Madtom VU 75 D2

USA

Noturus taylori

Caddo Madtom

VU 75 D2 USA

Noturus trautmani Scioto Madtom

CR 185 B1+2c

USA [R. Scioto (Big Darby Creek)]

Prietella lundbergi

VU 185 D2

Mexico

Prietella phreatophila

Bagre de Muzquiz

EN 49 Alace+2ce, B1+2bc

Mexico

Satan eurystomus

Widemouth Blindcat

VU 75 D2

USA

Trogloglanis pattersoni

Toothless Blindcat

VU 75 D2

USA

Family BAGRIDAE

Austroglanis barnardi Barnard's Rock-catfish

CR 158 BI+2bcd South Africa

Austroglanis gilli

Clanwilliam Rock-catfish VU 158 A1ce, B1+2c

South Africa

Coreobagrus ichikawai

Nekogigi

VU 101 Alac, D2

Pseudobargus medianalis

EN 101 B1+2c China

[L. Dianchi]

Family SILURIDAE

Silurus mento

EN 101 B1+2c

China

[L. Dianchi]

Family PANGASIIDAE

Pangasianodon gigas

Giant Catfish

EN 101 C2b

Cambodia, China, Laos, Myanmar

[R. Mekong]

Family AMBLYCIPITIDAE

Liobagrus nigricauda

EN 101 B1+2c

China

[L. Dianchi]

Family SISORIDAE

Oreoglanis siamensis

VU 101 D2

Thailand

Family CLARIIDAE

Clarias cavernicola

Cave Catfish

CR 158 B1+2c, E

Namibia

Clarias maclareni

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Encheloclarias curtisoma

CR 101 B1+2bce

Malaysia

Encheloclarias kelioides

CR 101 B1+2bcde

Indonesia, Malaysia

Encheloclarias prolatus

VU 101 D2

Malaysia

Encheloclarias tapeinopterus

VU 101 D2

Indonesia

Horaglanis krishnai

VU 185 D2

India

Uegitglanis zammaranoi

VU 185 BI+2c

Family HETEROPNEUSTIDAE

Heteropneustes microps

VU 101 D2

Sri Lanka

Family ARIIDAE

Arius bonillai

New Grenada Sea Catfish

EN 1 B1+2cd

Colombia

[Atlantic (western central), Pacific

(eastern central)]

Family PLOTOSIDAE

Oloplotosus torobo

Kutubu Tandan

VU 5 A2cd

Papua New Guinea

[L. Kutubu]

Family MOCHOKIDAE

Chiloglanis bifurcus

Incomati Suckermouth CR 158 Alae

South Africa

Family PIMELODIDAE

Rhamdia reddelli

Juil Ciego

VU 49 C2b, D2

Mexico

Rhamdia zongolicensis

VU 185 D2

Mexico

Family TRICHOMYCTERIDAE

Trichomycterus chungarensis

VU 185 D2

Chile

Order SALMONIFORMES

Family UMBRIDAE

Umbra krameri

European Mud-minnow

VU 185 Alace

Austria, Bosnia and Herzegovina?, Bulgaria, Croatia, Czech Republic?, Hungary, Moldova, Romania,

Slovakia, Slovenia, Ukraine?,

Yugoslavia

VU 101 A1ace, D2 Japan

Delta Smelt

**USA** 

Family RETROPINNIDAE

Family OSMERIDAE

EN 75 B1+2cd

Neosalanx regani

Ariakehimeshirauo

Family SALANGIDAE

Hypomesus transpacificus

Prototroctes maraena

Australian Grayling VU 179 A1c

Australia

Family GALAXIIDAE

Galaxias argenteus

Giant Kokopu

VU 113 C2a

New Zealand

Galaxias fontanus

Swan Galaxias

CR 179 B1+2bc

Australia

Galaxias fuscus

Barred Galaxias

CR 179 A1c+2c, BI+2b

Australia

[R. Goulburn]

Galaxias gracilis

Dwarf Inanga

VU 113 Alce, B1+2cd, D2

New Zealand

Galaxias johnstoni

Clarence Galaxias

CR 179 A1c, B1+2a

Australia

Galaxias pedderensis

Pedder Galaxias

CR 179 Alac+2c, B1+2abcde

Australia

[L. Pedder drainage]

Galaxias postvectis

Shortjawed Kokopu VU 113 B1+2bcd

New Zealand

Galaxias rekohua

Chathams Galaxias

VU 113 D2

New Zealand (Chatham Is)

Galaxias rostratus

Flat-Headed Galaxias

VU 179 A1c Australia



Galaxias tanycephalus

Saddled Galaxias VU 179 D2

Australia

Galaxiella pusilla Dwarf Galaxias

VU 179 B1+2bcd

Australia

Neochanna burrowsius

Canterbury Mudfish

VU 113 B1+2bcd New Zealand

Paragalaxias mesotes

Arthurs Paragalaxias

VU 179 D2 Australia

Family SALMONIDAE

Acantholingua ohridana

VU <sup>101</sup> B1+2bc Albania, Macedonia

[L. Ohrid]

Coregonus hoyi

Bloater

VU 75 D2 Canada, USA [Great Lakes]

Coregonus huntsmani

Acadian Whitefish

VU 75 D2

Canada, USA [Great Lakes]

Coregonus kiyi

Kiyi

VU 75 D2 Canada, USA [Great Lakes]

Coregonus reighardi

Shortnose Cisco

CR 75 Alae Canada

[L. Huron (Georgian Bay)]

Coregonus zenithicus

Shortjaw Cisco

VU 75 A1bc Canada, USA

[Great Lakes]

Hucho hucho Huchen

EN 101 A2bcde, B1+2bce

Austria, Bosnia and Herzegovina?, Croatia, Czech Republic, Germany, Hungary, Poland, Romania,

Slovakia, Slovenia, Ukraine, Yugoslavia

[R. Danube]

Oncorhynchus apache

Apache Trout CR 75 Alcd

USA

Oncorhynchus chrysogaster

Mexican Golden Trout

VU 49 A2ce Mexico

Oncorhynchus formosanus

CR 101 B1+2d

Taiwan

Oncorhynchus gilae

Gila Trout

EN 75 B2ad+3c

USA

Oncorhynchus ishikawai

Satsukimasu Salmon

EN 101 Alac, B2abcde+3abd

Japan

[R. Nagara]

Salmo carpio

Carpione del Garda

VU 185 Alacde

Italy

[L. Garda]

Salmo letnica

VU 185 Alad+2d

Albania, Macedonia

[L. Ohrid]

Salmo platycephalus

Ala Balik

CR 101 B1+2abc

Turkey

Salmothymus obtusirostris

EN 185 Alace Croatia, Yugoslavia

Salvelinus confluentus

Bull Trout

VU 75 A2e

Canada, USA

Salvelinus japonicus

Kirikuchi Char

EN 101 Alacde, B1+2ac

Japan

[R. Totsukawa]

Salvethymus svetovidovi

VU 101 D2 Russia

[L. El'gygytgyn]

Order PERCOPSIFORMES

Family AMBLYOPSIDAE

Amblyopsis rosae

Ozark Cavefish VU 75 D1+2

USA

Amblyopsis spelaea

Northern Cavefish
VU 75 D2

USA

USA

Speoplatyrhinus poulsoni

Alabama Cavefish

CR 75 C2b

USA

Typhlichthys subterraneus

VU 185 D2

USA

Order GADIFORMES

Family MORIDAE

Physiculus helenaensis

Skulpin

CR 131 D1

St Helena

[Atlantic (southeast)]

Family GADIDAE

Gadus morhua (C)

Atlantic Cod

VU 162 Albd

[Atlantic (northeast, northwest)]

Melanogrammus aeglefinus (C)

Haddock

VU 162 A1d+2d

[Atlantic (northeast, northwest)]

Order OPHIDIIFORMES

Family BYTHITIDAE

Lucifuga simile

VU 185 D2 Cuba

Lucifuga spelaeotes

New Providence Cusk-eel

VU 185 A1ce, B1+2bc, D2

Bahamas

Lucifuga subterranea

VU 185 D2

Cuba

Lucifuga teresinarum

VU 185 D2

Cuba

Saccogaster melanomycter

VU D2

Colombia

[Atlantic (western central)]

Stygicola dentata

VU 185 D2

Cuba

Typhliasina pearsei

Dama Ciega Blanca VU 49 D2

Mexico

### Order BATRACHOIDIFORMES

### Family BATRACHOIDIDAE

Batrachoides manglae

Cotuero Toadfish

VU D2

Colombia, Venezuela

[Atlantic (western central), Pacific

(eastern central)]

Sanopus astrifer

Whitespotted Toadfish

VU 147 D2

Belize

[Atlantic (western central)]

Sanopus greenfieldorum

Whitelined Toadfish

VU 147 D2

Belize

[Atlantic (western central)]

Sanopus reticulatus

Reticulated Toadfish

VU 147 D2

Belize

[Atlantic (western central)]

Sanopus splendidus

Splendid Toadfish

VU 147 D2

Belize, Mexico

[Atlantic (western central)]

#### Order LOPHIIFORMES

### Family BRACHIONICHTHYIDAE

Brachionichthys hirsutus

Spotted Handfish

CR 35 A1cde

Australia

[Indian Ocean (eastern)]

#### Order ATHERINIFORMES

# Family ATHERINIDAE

Cairnsichthys rhombosomoides

Cairns Rainbowfish

VU 179 A1ce, D2

Australia

Chilatherina bleheri

Bleher's Rainbowfish

VU 5 A2e

Indonesia

[Danau Biru (L. Holmes)]

Chilatherina sentaniensis

Sentani Rainbowfish

CR 5 Alace

Indonesia

[L. Sentani]

Chirostoma bartoni

Charal de la Caldera

VU 49 A2c, C2b, D2

Mexico

Craterocephalus amniculus

Darling River Hardyhead

VU 179 AIc

Australia

Craterocephalus dalhousiensis

Dalhousie Hardyhead

VU 179 D2

Australia

Craterocephalus fluviatillis

Murray Hardyhead

EN 179 Alc, BI+2ab

Australia

[Kerang Lakes area]

Craterocephalus gloveri

Glovers Hardyhead

VU 179 D2

Australia

Craterocephalus lacustris

Kutubu Hardyhead

VU 5 A2cd

Papua New Guinea

IL. Kutubul

Glossolepis incisus

Red Rainbowfish

VU 5 A2ce

Indonesia

[L. Sentani]

Glossolepis wanamensis

Lake Wanam Rainbowfish

CR 5 Alae

Papua New Guinea

[L. Wanam]

Kiunga ballochi

Glass Blue-eye

CR 5 Alac, B1+2abcde

Papua New Guinea

Melanotaenia arfakensis Arfak Rainbowfish

VU 5 A2ce

Indonesia

[R. Prafi valley]

[K. Fran vancy]

Melanotaenia boesemani Boeseman's Rainbowfish

EN 5 Alad

Indonesia

[Ayamaru Lakes]

Melanotaenia eachamensis

Lake Eacham Rainbowfish

VU 179 A1ace+2ce, B1+2b, C1, D2

Australia

Melanotaenia lacustris

Lake Kutubu Rainbowfish

VU 5 Alac

Papua New Guinea

[L. Kutubu]

Melanotaenia oktediensis

Oktedi Rainbowfish

VU 5 A2ce

Papua New Guinea

[R. Ok Tedi]

Melanotaenia parva

Lake Kurumoi Rainbowfish

VU 5 A2ce

Indonesia

[L. Kurumoi]

Menidia extensa

Waccamaw Silverside

VU 75 D2

USA

[L. Waccamaw]

Paratherina cyanea

VU 101 D2

Indonesia

[Malili Lakes]

Paratherina labiosa

VU 101 D2

Indonesia

[Malili Lakes]

Paratherina lineata

VU 185 D2

Indonesia
[L. Towuti]

Paratherina striata

VII 101 D2

Indonesia

Paratherina wolterecki

VU 101 D2

Indonesia

[Malili Lakes]

Poblana alchichica

Charal de Alchichica CR 49 Alac+2c, B1+2c, C2b

CR 49 Mexico

D. I.I. . . . . I. . I . . . . . .

Poblana letholepis Charal de la Preciosa

EN 49 A1ac+2c, B1+2c, C2b

Mexico

Poblana squamata

Charal de Quechulac EN 49 Alac+2c, B1+2c, C2b

Mexico

Pseudomugil mellis

Honey Blue-eye

EN 179 Alacde+2cde

Australia

Rheocles wrightae

Zona

CR 168 A1c

Madagascar

[R. Manambola]



Scaturiginichthys vermeilipinnis

Red-finned Blue-eye

CR <sup>179</sup> A1ce, B2abcde+3d Australia

Telmatherina abendanoni

VU 101 D2 Indonesia [Malili Lakes]

[R. Thomson]

Telmatherina antoniae

VU 185 D2 Indonesia [L. Matano]

Telmatherina celebensis

VU 101 D2 Indonesia

Telmatherina ladigesi

Celebes Rainbow VU 101 D2 Indonesia

Telmatherina obscura

VU 185 D2 Indonesia [L. Matano]

Telmatherina opudi

VU 185 D2 Indonesia [L. Matano]

Telmatherina prognatha

VU 185 D2 Indonesia [L. Matano]

Telmatherina sarasinorum

VU 185 D2 Indonesia [L. Matano]

Telmatherina wahjui

VU <sup>185</sup> D2 Indonesia [L. Matano]

Tominanga aurea

VU 185 D2 Indonesia [L. Matano]

Tominanga sanguicauda

VU 185 D2 Indonesia [L. Towuti]

Family PHALLOSTETHIDAE

Phallostethus dunckeri

VU 101 D2 Malaysia Order CYPRINODONTIFORMES

Family APLOCHEILIDAE

Campellolebias brucei Santa Catarina Sabrefin VU <sup>185</sup> B1+3bd

Brazil

Cynolebias boitonei Brasilia Lyrefin

VU 185 B1+3bd

Brazil

Cynolebias constanciae

VU <sup>185</sup> B1+2ac+3bd Brazil

Cynolebias marmoratus

Ginger Pearlfish

VU <sup>185</sup> B1+2ac+3bd Brazil

Cynolebias minimus Minute Pearlfish

VU 185 B1+2ac+3bd Brazil

Cynolebias opalescens Opalescent Pearlfish

VU 185 B1+2ac+3bd Brazil

Cynolebias splendens Splendid Pearlfish

VU <sup>185</sup> B1+2ac+3bd Brazil

Nothobranchius sp. Caprivi Killifish

EN 158 B1+2c Namibia

Pachypanchax sakaramyi

VU 168 B1+2a, D2 Madagascar

Family CYPRINODONTIDAE

Aphanius anatoliae

Dislisazancik Baligi
EN 101 A2ce, B1+2abcd
Turkey

Aphanius burduricus

EN <sup>185</sup> A2e Turkey

Aphanius splendens

CR <sup>101</sup> A1ac, B1+2abce Turkey

Aphanius sureyanus CR 101 B1+2bc

Turkey

Aphanius transgrediens

CR 101 B1+2bcd Turkey Crenichthys baileyi
White River Springfish

VU <sup>75</sup> D2 USA [R. White]

Crenichthys nevadae Railroad Valley Springfish

VU <sup>75</sup> D2 USA

Cualac tessellatus

Cachorrito de Media Luna EN 49 A2e, B1+2ab

Mexico

Cyprinodon beltrani

Cachorrito Lodero

EN <sup>49</sup> A1abc+2bc, B1+2c, C2b Mexico

Cyprinodon bovinus

Leon Springs Pupfish CR 75 A2c

USA A2

Cyprinodon diabolis Devils Hole Pupfish

> **VU** 75 D1+2 USA

Cyprinodon elegans

Comanche Springs Pupfish EN 75 A2ce, B1+2ac USA

Cyprinodon fontinalis Perrito de Carbonera

EN <sup>49</sup> A1ae+2e, B1+2ab, C2a Mexico

Cyprinodon labiosus

Cachorrito Cangrejero

EN 49 Alabc+2bc, Bl+2c, C2b Mexico

Cyprinodon macrolepis Largescale Pupfish

EN 49 Alabc+2bce, B1+2c, C2b Mexico

Cyprinodon maya

Cachorrito Gigante

EN 49 Alabc+2bc, Bl+2c, C2b Mexico

Cyprinodon meeki Cachorrito de Mezquital

CR 49 Alae+2e

Mexico

Cyprinodon pachycephalus
Cachorrito Cabezon

CR <sup>49</sup> Alabc+2bc, B1+2c, C2b Mexico

Cyprinodon pecosensis

Pecos Pupfish
CR 75 A2ce
USA

Mexico

Mexico

Ataeniobius toweri

EN 49 A2ce, B1+2abc

Striped Goodeid

Gambusia longispinis Characodon audax Cyprinodon radiosus Guayacon de Cuatro Cienegas Bold Characodon Owens Pupfish VÚ 49 A2c, D2 VU 49 A1ac+2c, B1+2c, C2a, D2 EN 75 A2ce Mexico Mexico USA Gambusia nobilis Characodon lateralis Cyprinodon simus Pecos Gambusia Cachorrito Boxeador Rainbow Goodeid VU 75 D2 EN 49 A1abc+2bc, B1+2c, C2b EN 49 Alabe+2be, B1+2ab USA Mexico Mexico [R. Pecos] Cyprinodon tularosa Girardinichthys multiradiatus Poecilia latipunctata White Sands Pupfish VU 49 A2ce, D2 Molly del Tamesi VU 75 D2 Mexico CR 49 Alace+2ce, B1+2ab, C1 USA Girardinichthys viviparus Mexico Cyprinodon verecundus Mexclapique Poecilia sulphuraria Cachorrito de Dorsal Larga CR 49 A1ce+2ce, B1+2abc Molly del Teapa CR 49 Alabc+2bc, B1+2c, C2b Mexico CR 49 A1ac+2ce, B1+2ac, C2b Mexico Mexico Goodea gracilis Cyprinodon veronicae VU 49 A1ace+2ce, B1+2c, C1 Xiphophorus couchianus Cachorrito de Charco Azul Platy Monterrey Mexico CR 49 A1ac, B1+2abce, C1+2b CR 49 A1ce+2ce, B1+2abc, C2a Hubbsina turneri Mexico Mexico CR 49 A1ac+2c, B1+2e, C2b Fundulus julisia Xiphophorus gordoni Mexico Barrens Topminnow Platy Cuatro Cienegas VU 75 D2 Ilydon whitei EN 49 Ala, B1+2abce, C1 CR 49 Alac, B1+2abc USA Mexico Mexico Fundulus waccamensis Xiphophorus meyeri Xenoophorus captivus Platy de Muzquiz Waccamaw Killifish Solo Goodeido EN 49 Alace+2ce, B1+2c, C2b VU 75 D2 EN 49 A1ce+2ce, B1+2c, C1+2a Mexico USA [L. Phelps, L. Waccamaw] Mexico Order BELONIFORMES Lucania interioris Family POECILIIDAE Sardinilla Cuatro Cienegas Family ADRIANICHTHYIDAE CR 49 A1ac+2c, B1+2abc, C2a Gambusia alvarezi Adrianichthys kruyti Guayacon de San Gregorio Mexico Duck-billed Buntingi VU 49 A1ce+2ce, B1+2c, C2b, D2 Orestias chungarensis CR 101 Alae Mexico VU 185 D2 Indonesia Chile Gambusia eurystoma [L. Poso] [L. Chungara] Guayacon Bocon Oryzias celebensis CR 49 A1ac+2ce, B1+2ac, C2b Pantanodon madagascariensis VU 185 D2 Mexico EN 168 B1+2a **Indonesia** Madagascar Gambusia gaigei [L. Sindenreng] Big Bend Gambusia Valencia hispanica Oryzias marmoratus VU 75 D1+2 Valencia Toothcarp VU 101 D2 **USA** EN 185 B1+2ce Indonesia Spain Gambusia heterochir Oryzias matanensis Clear Creek Gambusia VU 101 D2 Valencia letourneuxi VU 75 D1+2 EN 101 A2bcd Indonesia Albania?, Greece USA [Malili Lakes] [Wilkinson Springs, upper Clear Oryzias nigrimas Family GOODEIDAE Creek] Black Buntingi VU 101 A2e, D2 Allotoca maculata Gambusia hurtadoi Opal Goodeid Guayacon de Hacienda Dolores Indonesia CR 49 B1+3abc VU 49 A1ace+2ce, B1+2ac, C2b, [L. Poso]

Oryzias orthognathus

Buntingi EN 101 A2e

Indonesia

[L. Poso]

D1, E

VU 49 A1ce+2ce, D2

Gambusia krumholzi

Mexico

Mexico



Oryzias profundicola

VU 101 D2 Indonesia

[Malili Lakes]

Xenopoecilus oophorus

Egg-carrying Buntingi

EN 101 A2e

Indonesia [L. Poso]

Xenopoecilus poptae

Rentale Popular

Popta's Buntingi CR 101 A I ae

Indonesia

[L. Poso]

Xenopoecilus sarasinorum

EN 101 A1e

Indonesia

Family HEMIRAMPHIDAE

Dermogenys weberi

VU 101 D2

Indonesia

[Malili Lakes]

Nomorhamphus towoeti

VU 185 D2

Indonesia

[L. Towuti]

Tandanichthys kattelati

VU 185 D2

Indonesia

[L. Tondano]

Order GASTEROSTEIFORMES

Family GASTEROSTEIDAE

Pungitius hellenicus

Ellinopygósteos

CR 101 B1+2bc

Greece

[Aggia Paraskevi Spring]

Family PEGASIDAE

Pegasus laternarius

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Order SYNGNATHIFORMES

Family SYNGNATHIDAE

Hippocampus abdominalis

Big-bellied Seahorse

VU 178 A2d

Australia, New Zealand

[Indian Ocean (eastern), Pacific

(southwest)]

Hippocampus aimei

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)] Hippocampus angustus

VU 178 A2cd

Australia

[Indian Ocean (eastern)]

Hippocampus borbonensis

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus brachyrhynchus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus camelopardalis

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus capensis

Knysna Seahorse

VU 158 BI+2c

South Africa

[Atlantic (southeast)]

Hippocampus coronatus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus erectus

Lined Seahorse

VU 178 A2cd

[Atlantic (northwest, southwest, western central)]

Hippocampus erinaceus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus fuscus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus hippocampus

Short-snouted Seahorse

VU 178 A2cd

[Atlantic (eastern central, northeast), Mediterranean and Black Sea]

Hippocampus histrix

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus horai

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus ingens

Giant Seahorse

VU 178 A2cd

[Pacific (eastern central)]

Hippocampus japonicus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus jayakari

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus kuda

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippacampus longirastris

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus novaehebudorum

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus planifrons

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus raji

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus ramulosus

Long-snouted Seahorse

VU 178 A2cd

[Atlantic (northeast, western central), Mediterranean and Black Seal

Hippocampus reidi

Slender Seahorse

VU 178 A2cd

[Atlantic (southwest, western central)]

Hippocampus sindonis

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus spinosissimus

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus taeniops

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus takakurae

VU 178 A2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)] Hippocampus trimaculatus

Three-spotted Seahorse

VU 178A1cd+2cd

[Indian Ocean (eastern, western), Pacific (northwest, southwest,

western central)]

Hippocampus whitei

White's Seahorse

VU 178A2cde

Australia

[Indian Ocean (eastern)]

Hippocampus zosterae

Dwarf Seahorse

VU 178A2cd

[Atlantic (western central)]

Solegnathus dunckeri

Duncker's Pipehorse

VU 178A1d+2d

Australia

[Pacific (southwest, western central)]

Solegnathus hardwickii

Pipehorse

VU 178A1d+2d

[Pacific (northwest, western central)]

Solegnathus lettiensis

Gunther's Pipehorse

VIJ 178A2d

Australia, Indonesia

[Indian Ocean (eastern), Pacific

(western central)]

Solegnathus robustus

Robust Pipehorse

VU 178A2d

Australia

[Indian Ocean (eastern)]

Solegnathus spinosissimus

Spiny Pipehorse

VU 178A1d+2d

Australia, New Zealand

[Pacific (southwest)]

Syngnathus watermayeri

River Pipefish

CR 20 B1+2abd

South Africa

Order SYNBRANCHIFORMES

Family SYNBRANCHIDAE

Ophisternon infernale

Anguila Ciega

EN 49 Alac+2c, B1+2c

Mexico

Order SCORPAENIFORMES

Family SCORPAENIDAE

Pontinus nigropunctatus

Deepwater Jack

VÛ 131 D2

St Helena

[Atlantic (southeast)]

Sebastes fasciatus

Redfish

EN 162 A1bd

[Atlantic (northeast, northwest)]

Sebastes paucispinus

Boccacio Rockfish

CR 162 Alabd+2d

Canada, Mexico, USA

[Pacific (eastern central, northeast)]

Family COTTIDAE

Cottus asperrimus

Rough Sculpin

VÜ 75 D2

USA

Cottus extensus

Bear Lake Sculpin

VU 75 D2

USA [L. Bear]

Cottus greenei

Shoshone Sculpin

VU 75 D2

USA

Cottus leiopomus

Wood River Sculpin

VU 75 D2

USA

Cottus petiti

CR 101 B1+2c

France

[R. Le Lez]

Cottus pygmaeus

Pygmy Sculpin CR <sup>75</sup> B1+2a

USA

[R. Coosa]

Order PERCIFORMES

Family PERCICHTHYIDAE

Edelia obscura

Yarra Pygrny Perch VU 179 B1+2bc

Australia

Maccullochella ikei

Clarence River Cod EN 179 Alacd

Australia

[R. Clarence]

Maccullochella macquariensis

Trout Cod

EN 179 C2a

Australia

Nannoperca oxleyana

Oxleyan Pygrny Perch

EN 179 A1ce+2c

Australia

Nannoperca variegata

Variagated Pygmy Perch

VU 179 D2

Australia

Family POLYPRIONIDAE

Stereolepis gigas

Giant Sea Bass

CR 162 A1bd

Mexico, USA [Pacific (eastern central)]

Family SERRANIDAE

Anthias salmopunctatus

VU 147 D2

Brazil

[Atlantic (eastern central, southwest)]

Epinephelus drummondhayi

Speckled Hind

CR 91 A1d+2d

[Atlantic (southwest, western

central)]

Epinephelus inermis

Marbled Grouper

VU 91 A2d

[Atlantic (southwest, western central)]

Epinephelus itajara

Jewfish

CR 150 A1d+2d

[Atlantic (eastern central, southeast,

southwest), Indian Ocean (western central), Pacific (eastern central,

southeast)]

Epinephelus lanceolatus

Giant Grouper

VU 150 A2d

[Indian Ocean (eastern, western),

Pacific (eastern central, northwest, southwest, western central)]

Epinephelus nigritus

Warsaw Grouper

CR 150 A1d+2d [Atlantic (southwest, western

central)]

Epinephelus niveatus

Snowy Grouper

VU 91 A1d+2d, B1+2e

[Atlantic (southwest, western

central)]



Epinephelus striatus
Nassau Grouper
EN <sup>150</sup> A1d+2d
[Atlantic (southwest, western central)]
Hypoplectrus providencianus

VU D2
[Atlantic (western central)]

Mycteroperca cidi
Venezuelan Grouper
VU ' D2
Venezuela
[Atlantic (western central)]

Masked Hamlet

Mycteroperca jordani
Gulf Grouper
VU 147 A1d+2d

Mexico
[Pacific (eastern central)]

Mycteroperca microlepis Gag VU 91 A1bd+2d

Brazil, Mexico, USA
[Atlantic (southwest, western central)]

Mycteroperca olfax
Bacalao Grouper
VU 147 A2d, D2
Ecuador (Galápagos Is)
[Pacific (eastern central)]

Ecuador (Galápagos Is)
[Pacific (eastern central)]

Mycteroperca prionura

Sawtail Grouper

VU 147 A1d+2d Mexico [Pacific (eastern central)]

Mycteroperca rosacea
Leopard Grouper
VU <sup>147</sup> A1d+2d
Mexico
[Pacific (eastern central)]

Plectranthias chungchowensis VU 147 D2

Taiwan
[Pacific (northeast)]

Pseudanthias regalis
VU 147 D2

French Polynesia [Pacific (eastern central)]

Family PSEUDOCHROMIDAE

Pseudochromis pesi VU <sup>147</sup> D2 [Indian Ocean (western)]

Family TERAPONTIDAE

Bidyanus bidyanus Silver Perch VU <sup>179</sup> Alcd Australia Hephaestus adamsoni Adamson's Grunter VU <sup>5</sup> A2cd Papua New Guinea [L. Kutubu]

Varia jamoerensis Yamur Lake Grunter VU ' A2d Indonesia [L. Yamur]

Family CENTRARCHIDAE

Ambloplites cavifrons
Roanoke Bass
VU 75 D2
USA

Family ELASSOMATIDAE

Elassoma okatie Bluebarred Pygmy Sunfish VU <sup>75</sup> D2 USA

Crystallaria asprella Crystal Darter VU <sup>75</sup> A1c USA

Family PERCIDAE

Etheostoma aquali Coppercheek Darter VU 185 A2ce USA

Etheostoma australe
Dardo de Conchos
VU 49 A1ce+2ce, B2c+3a
Mexico

Etheostoma boschungi Slackwater Darter EN <sup>75</sup> B1+2c USA [R. Tennessee]

Etheostoma cinereum Ashy Darter

VU <sup>75</sup> D2 USA

Etheostoma ditrema
Coldwater Darter
VU 75 D2
USA
[R. Coosa]

Etheostoma fonticola Fountain Darter

VU <sup>75</sup> D2 USA

Etheostoma grahami
Rio Grande Darter
VU <sup>49</sup> A2c, B1+2c, D2
Mexico, USA

Etheostoma moorei
Yellowcheek Darter
VU '' D2
USA
[R. White (R. Little Red)]
Etheostoma nianguae

Etheostoma nianguae
Niangua Darter
VU ''5 B1+2c, D1
USA
[R. Osage]

Etheostoma nuchale
Watercress Darter
EN 75 B1+2ce
USA
[R. Black Warrior]

Etheostoma okaloosae Okaloosa Darter EN <sup>75</sup> B1+2c

EN <sup>75</sup> B1+2c USA

[Choctawhatchee Bay drainage]

Etheostoma pallididorsum

Paleback Darter VU 75 D2 USA [R. Ouachita.]

Etheostoma pellucidum
Eastern Sand Darter
VU 75 Alc
Canada, USA

Etheostoma pottsi
Mexican Darter
VU 49 Alace+2ce, B1+2c
Mexico

Etheostoma striatulum
Striated Darter
VU 75 D2
USA

[R. Duck]

Etheostoma trisella

Trispot Darter

VU 75 D2

USA

Etheostoma tuscumbia
Tuscumbia Darter
VU 75 D2
USA

[R. Tennessee]

Etheostoma wapiti
Boulder Darter

VU 75 D2

USA

Gymnocephalus schraetzer
Striped Ruffe

VU 185 Alace Austria, Bulgaria, Croatia?, Czech Republic, Germany, Hungary, Moldova?, Romania, Slovakia, Ukraine?, Yugoslavia [R. Danube] Percarina demidoff

VII 185 D2

Moldova?, Russia, Ukraine

Percina antesella

Amber Darter

VU 75 D2

USA

Percina aurolineata

Goldline Darter

VU 75 D2

USA

[R. Cahaba, R. Coosa]

Percina burtoni

Blotchside Logperch

VU 75 D2

USA

[R. Tennessee]

Percina cymatotaenia

Bluestripe Darter

EN 75 B1+2ac

USA

Percina jenkinsi

Conasauga Logperch

VU 75 D2

USA

Percina lenticula

Freckled Darter

VU 75 B1+2ad, D2

USA

Percina pantherina

Leopard Darter

VU 75 D2

USA

[R. Little]

Percina rex

Roanoke Logperch

VU 75 B1+2c, D2

USA

Percina tanasi

Snail Darter

VU 75 D2

USA

Romanichthys valsanicola

Asprete

CR 185 Alace+2ce, B1+2abcde

Romania

[R. Arges]

Zingel asper

Apron

CR 101 B1+2abcde

France, Switzerland

[R. Rhône]

Zingel streber

Streber

VU 185 Alce+2ce

Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Greece, Hungary, Italy?, Moldova?, Slovakia, Slovenia, Switzerland?, Ukraine, Yugoslavia

Zingel zingel

Zingel

VU 185 A1ce+2ce

Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic,

Germany, Hungary, Moldova, Romania, Slovakia, Slovenia,

Ukraine, Yugoslavia

Family LUTJANIDAE

Lutianus analis

Mutton Snapper

VU 91 A2d, B1+2e

[Atlantic (southwest, western central)]

Lutjanus cyanopterus

Cubera Snapper

VU 91 A2d

[Atlantic (southwest, western

central)]

Family HAEMULIDAE

Anisotremus moricandi

**Brownstriped Grunt** 

EN 1 A2c

Brazil, Colombia, Panama, Venezuela [Atlantic (eastern central, southwest),

Pacific (western central)]

Family SPARIDAE

Pagrus pagrus

Red Porgy

EN 91 Albd+2d

[Atlantic (eastern central, northeast, northwest, southeast, southwest,

western central), Mediterranean and Black Seal

Family SCIAENIDAE

Totoaba macdonaldi

Totoaba

CR 49 Alabce+2bce, Bl+2ce+3ad

Mexico

Family CHAETODONTIDAE

Chaetodon flavocoronatus

Yellow-crowned Butterflyfish

VU 147 D2

Guam

[Pacific (western central)]

Chaetodon litus

Easter Island Butterflyfish

VU 111 D2

Chile (Easter Id)

[Pacific (southwest)]

Chaetodan marleyi

Marley's Butterflyfish

VU 147 D2

[Atlantic (southeast)]

Chaetodon obliquus

VU 147 D2

Brazil

[Atlantic (eastern central, southwest)]

Chaetodon robustus

VU 147 D2

Cape Verde

[Atlantic (eastern central)]

Family POMACANTHIDAE

Centropyge resplendens

Resplendent Pygmy Angelfish

VU 147 D2

St Helena (Ascension)

[Atlantic (southeast)]

Family CICHLIDAE

Allochromis welcommei CR 97 Alacde, B1+2ce

Uganda

[L. Nawampasa]

Astatotilapia "dwarf bigeye scraper"

CR 97 Alace, B1+2c

Kenya

[L. Kanyaboli]

Astatotilapia "shovelmouth"

EN 97 Alacde, B1+2ce

[L. Kyoga, L. Nawampasa]

Astatotilapia barbarae

EN 97 Alace, B1+2bcde

Uganda

[R. Victoria Nile] [L. Nawampasa, L. Victoria]

Astatotilapia brownae

EN 97 Alace

Tanzania

[L. Victoria]

Astatotilapia latifasciata

CR 97 Alacde, B1+2ce

Uganda

[L. Nawampasa]

Astatotilapia piceata

EN 97 Alace, B1+2acd

Tanzania

IL. Victorial

Astatotilapia velifer

VU 97 A1ae, B1+2c

Uganda

[Nabugabo Lakes]

Chetia brevis Orange-fringed Largemouth

VU 158 Ale

Mozambique, South Africa



Cichlasoma bartoni
Mojarra Caracolera
VU 49 A1ac+2c, B1+2c, C1
Mexico

Cichlasoma labridens

Mojarra

EN 49 A2ce, B2ab+3a Mexico

Cichlasoma minckleyi
Mojarra Caracolera de Cuatro
Cienegas
VU 49 A1ce+2ce, B1+2c

Mexico

Cichlasoma pantostictum Mojarra

VU 49 A1c, B1+2c Mexico

Cichlasoma steindachneri Mojarra

VU <sup>49</sup> A2e, B1+2c, D2 Mexico

Enterochromis paropius
CR <sup>97</sup> Alace, B1+2acd
Tanzania
[L. Victoria]

Gaurochromis simpsoni EN 97 Alace, B1+2cd Uganda

[Nabugabo Lakes]

Haplochromis "ruby"

CR 97 Alacde, B1+2ce Uganda

[L. Nawampasa]

Haplochromis annectidens CR <sup>97</sup> Alace, B1+2cde Uganda [L. Nabugabo]

Haplochromis obliquidens EN <sup>97</sup> Alace, B1+2acd Tanzania, Uganda [L. Bunyoni, L. Victoria]

Harpagochromis "frogmouth"
VU 97 Alae, B1+2acd
Kenya, Uganda
[L. Victoria]

Harpagochromis plagiostoma CR <sup>97</sup> A1ace, B1+2acd Uganda [L. Victoria]

Harpagochromis worthingtoni CR <sup>97</sup> Alacde, B1+2ce Uganda

[L. Nawampasa]

Konia dikume
Dikume
CR <sup>185</sup> A1cde, B1+2c
Cameroon
[L. Barombi Mbo]

Konia eisentrauti Konve

CR 185 B1+2c Cameroon

[L. Barombi Mbo]

Lipochromis "backflash cryptodon"
CR 97 A1acde, B1+2ce
Uganda

[L. Nawampasa]

Lipochromis "black cryptodon"
CR 97 Alace, B1+2acd
Tanzania
[L. Victoria]

Lipochromis "parvidens-like"
CR 97 Alacde, B1+2ce
Uganda
[L. Nawampasa]
Lipochromis "small obesoid"

Lipochromis "small obesoid"
CR 97 Alacde, B1+2ce
Uganda
[L. Nawampasa]

Lipochromis maxillaris
CR 97 Alace, B1+2abcde
Kenya
[L. Kanyaboli]

Lipochromis melanopterus complex CR <sup>97</sup> Alace, B1+2acd Tanzania [L. Victoria]

Macropleurodus bicolor CR <sup>97</sup> Alace, B1+2acd Tanzania [L. Victoria]

Myaka myaka
Myaka Myaka
CR <sup>185</sup> B1+2c
Cameroon
[L. Barombi Mbo]

Oreochromis esculentus

VU 97 Alacde, B1+2ce Kenya, Tanzania, Uganda

Oreochromis variabilis
VU 97 Alacde, B1+2ce
Kenya, Uganda
[L. Nawampasa, L. Victoria]

Oxylapia polli
VU 168 D2

Madagascar [Marolambo Rapids, R. Nosivolo]

Paralabidochromis beadlei CR <sup>97</sup> Alace, B1+2cd Uganda [L. Nabugabo]

Paralabidochromis chilotes complex VU 97 Alace, B1+2acd Kenya, Tanzania, Uganda

[L. Victoria]

Paralabidochromis chromogynos

VU <sup>97</sup> Alace, B1+2acd Kenya, Tanzania, Uganda [L. Victoria]

Paralabidochromis crassilabris VU <sup>97</sup> Alace, B1+2acd Kenya, Tanzania, Uganda [L. Victoria]

Paralabidochromis victoriae CR <sup>97</sup> Alace, B1+2abcd Kenya [L. Victoria]

Paretroplus dami Damba VU 168 A2ce Madagascar

Paretroplus kieneri Kotsovato VU <sup>168</sup> A2ce Madagascar

Paretroplus maculatus
Damba Mipentina
CR <sup>168</sup> A2cde, B1+2abcde
Madagascar

Paretroplus petiti
Kotso
CR <sup>168</sup> A2cde, B1+2abcde
Madagascar

Prognathochromis "long snout"
EN 97 Alacde, Bl+2ce
Uganda
[L. Kyoga, L. Nawampasa]

Prognathochromis howesi EN 97 Alace, B1+2acd Tanzania [L. Victoria]

Prognathochromis mento CR <sup>97</sup> Alace, B1+2acd Tanzania [L. Victoria]

Prognathochromis venator EN <sup>97</sup> Alace, B1+2cd Uganda [Nabugabo Lakes]

Prognathochromis worthingtoni
CR <sup>97</sup> Alacde, B1+2ce
Uganda
[L. Nawampasa]

Psammochromis acidens
VU 97 A1ace, B1+2acd
Kenya, Tanzania, Uganda
[L. Victoria]

Psammochromis aelocephalus VU 97 Alac, Bl+2acd Kenya, Tanzania, Uganda [L. Victoria] Ptchochromoides sp.

Katria

VU 168 D2

Madagascar

Ptychochromoides betsileanus

Trondo Mainty

CR 168 A1ace, B1+2abcde, C2a

Madagascar

Ptyochromis "Rusinga oral sheller"

CR 97 Alace, B1+2acd

Kenya

[L. Victoria]

Ptyochromis "rainbow sheller"

CR 97 Alac, B1+2acd

Kenya, Tanzania

[L. Victoria]

Ptvochromis annecteus

EN 97 Alace, B1+2acd

Kenya

[L. Victoria]

Ptyochromis granti

EN 97 Alace, B1+2acd

Kenya

[L. Victoria]

Ptyochromis sauvagei

VU 97 Alace, B1+2acd

Kenya, Tanzania

[L. Victoria]

Pungu maclareni

Pungu

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Pyxichromis orthostoma

VU 97 Alace, B1+2ce

Uganda

[L. Kyoga, L. Nawampasa]

Sarotherodon caroli

Fissi

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Sarotherodon linnellii

Unga

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Sarotherodon lohbergeri

Leka Keppe

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Sarotherodon steinbachi

Kululu

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Stomatepia moriae

Nsess

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Stomatepia mongo

Mongo

CR 185 Alcde, B1+2c

Cameroon

[L. Barombi Mbo]

Stomatepia pindu

Pindu

CR 185 B1+2c

Cameroon

[L. Barombi Mbo]

Tilapia "jewel"

VU 168 D2

Cameroon

[L. Ejagham]

Tilapia "little black"

VU 168 D2

Cameroon

[L. Ejagham]

Tilapia "yellow-green"

VU 168 D2

Cameroon

[L. Ejagham]

Tilapia bakossiorum

VU 185 D2

Cameroon

[L. Bermin]

Tilapia bemini

VÜ 185 D2

Cameroon

[L. Bermin]

Tilapia bythobathes

VU 185 D2 Cameroon

[L. Bermin]

Tilapia deckerti

VU 185 D2

Cameroon

[L. Ejagham]

Tilapia flava

VU 185 D2

Cameroon

[L. Bermin]

Tilapia guinasana

Otjikoto Tilapia CR 158 B1+2ce

Namibia

Tilapia gutturosa

VU 185 D2

Cameroon

[L. Bermin]

Tilapia imbriferna

VU 185 D2

Cameroon

[L. Bermin]

Tilapia kottae

VU 185 D2

Cameroon

[L. Barombi ba Kotto, L. Mboadong]

Tilapia snyderae

VU 185 D2

Cameroon

[L. Bermin]

Tilapia spongotroktis

 $\mathbf{V}\mathbf{\hat{U}}^{185}\mathbf{\hat{D}}\mathbf{\hat{Z}}$ 

Cameroon

[L. Bermin]

Tilapia thysi

VU 185 D2

Cameroon [L. Bermin]

Xystichromis "Kyoga flameback"

CR 97 Alace, B1+2ce

Uganda

[L. Nawampasa]

Xystichromis nuchisquamulatus

EN 97 Alace, B1+2acd

Kenya

[L. Victoria]

Xystichromis phytophagus

CR 97 Alace, B1+2acd

Kenva

[L. Kanyaboli]

Yssichromis pyrrhocephalus

VU 97 Alace, B1+2acd

Kenya, Tanzania

[L. Victoria]

Family POMACENTRIDAE

Chromis sanctaehelenae

VU 147 D2

St Helena

[Atlantic (southeast)]

Stegastes sanctaehelenae

VU 147 D2

St Helena

[Atlantic (southeast)]

Stegastes santipaulae

VU 147 D2

Brazil

[Atlantic (eastern central, southwest)]

Family MUGILIDAE

Liza luciae

Saint Lucia Mullet

EN 158 B1+2ab+3a

South Africa



Family LABRIDAE

Cheilinus undulatus

Humphead Wrasse

VU 150 Ald+2cd

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Lachnolaimus maximus

Hogfish

VU 91 A2d

[Atlantic (southwest, western

Thalassoma ascensionis

VU 147 D2

St Helena (Ascension)

[Atlantic (southeast)]

Xyrichtys virens

VU 147 D2

French Polynesia

[Pacific (eastern central, southwest)]

Family SCARIDAE

Scarus guacamaia

Rainbow Parrotfish

VU 150 Ald+2d

[Atlantic (southwest, western

central)]

Family CLINIDAE

Clinus spatulatus

Bot River Klipfish

EN 158 B1+2c

South Africa

Family CHAENOPSIDAE

Coralliozetus tayrona

Tayrona Blenny

VU D2

Colombia

Protemblemaria punctata

VU 1 D2

Venezuela

[Atlantic (western central)]

Family CALLIONYMIDAE

Callionymus sanctaehclenae

St Helena Dragonet

CR 131 D1

St Helena

[Atlantic (southeast)]

Family ELEOTRIDAE

Boroda expatria

VU 185 D2

Philippines

[L. Manguao]

Gobiomorphus alpinus

Tarndale Bully

VU 113 D2

New Zealand

Mogurnda furva

Black Mogurnda

VU 5 A2cd

Papua New Guinea

[L. Kutubu]

Mogurnda spilota

Blotched Mogurnda

VU 5 A2cd

Papua New Guinea

[L. Kutubu]

Mogurnda variegata

Variegated Mogurnda

VU<sup>-5</sup> A2cd

Papua New Guinea

[L. Kutubu]

Mogurnda vitta

Striped Mogurnda

VU 5 A2cd

Papua New Guinea

[L. Kutubu]

Typhleotris madgascarensis

VU 168 D2

Madagascar

Typhleotris pauliani

VU 168 D2

Madagascar

Family GOBIIDAE

Chlamydogobius gloveri

Dalhousie Goby

VU 179 D2

Australia

Chlamydogobius micropterus

Elizabeth Springs Goby

CR 179 Alc. B1+2c

Australia

Chlamydogobius squamigenus

**Edgbaston Goby** 

CR 179 Alace, B2abcde+3d

Australia

Economidichthys pygmaeus

VU 185 A2ce

Greece

Economidichthys trichonis

Nanogoviós

VU 185 D2 Greece

[L. Trichonis]

Eucyclogobius newberryi

**Tidewater Goby** 

VU 75 A1c+2c

**USA** 

Glossgobius flavipinnis

VU 185 D2 Indonesia

[L. Towuti]

Glossogobius ankaranensis

CR 185 B1+2c

Madagascar

Glossogobius intermedius

VU ioi D2

Indonesia

Glossogobius matanensis

VU 101 D2

Indonesia

Knipowitschia croatica

VU 101 D2

Croatia

Knipowitschia punctatissima

VU 185 A2c

Italy

Knipowitschia thessala

Thessalogovinós

VU 185 A2ce

Greece

Lentipes whittenorum

VU 101 D2

Indonesia

Mugilogobius adeia

VU 101 D2

Indonesia

Mugilogobius latifrons

VU 101 D2 Indonesia

Padogobius nigricans

Amo Goby

VU 185 Alace

Italy

Pandaka pygmaea

Dwarf Pygmy Goby

CR 185 Alace

Philippines

[R. Malabon]

Sicyopus axillimentus

VU 101 D2 Philippines

Stiphodon surrrufus

VU 101 D2

Philippines

Stupidogobius flavipinnis VU 101 D2

Indonesia

[Malili Lakes]

Tamanka sarasinorum Sarasin's Goby

VU 101 D2

Indonesia

[Malili Lakes]

Weberogobius amadi Poso Bungu

CR 101 Alae

Indonesia

[L. Poso]

### Family SCOMBRIDAE

Scomberomorus concolor
Monterrey Spanish Mackerel
EN <sup>151</sup> Alc+2d
Mexico
[Pacific (western central)]

Thunnus maccoyii (C)
Southern bluefin Tuna
CR <sup>144</sup> Albd
[Atlantic (southeast, southwest),
Indian Ocean (eastern, western),
Pacific (southwest)]

Thunnus obesus (C)

Bigeye Tuna VU <sup>177</sup> Albd [Atlantic (eastern central, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, northwest, southeast, southwest, western central)]

# Family ANABANTIDAE

Sandelia bainsii
Eastern Province Rocky
EN <sup>158</sup> AIe, BI+2abcd
South Africa

### Family BELONTIIDAE

Betta burdigala VU 101 D2 Indonesia

Betta chini VU 101 D2 Malaysia

Betta chloropharynx VU 101 D2 Indonesia

Betta hipposideros VU <sup>101</sup> D2 Malaysia

Betta livida EN <sup>101</sup> B1+2c Malaysia

Betta macrostoma VU 101 D2 Brunei

Betta miniopinna CR 101 A2c Indonesia

Betta persephone CR 101 B1+2c Malaysia Betta simplex VU 101 D2 Thailand

Betta spilotogena CR 101 A2c Indonesia

Betta tomi VU <sup>101</sup> D2 Malaysia

Atlantic Halibut

Parosphromenus harveyi EN <sup>101</sup> B1+2c Malaysia

### Order PLEURONECTIFORMES

# Family PLEURONECTIDAE Hippoglossus hippoglossus

EN <sup>162</sup> AId
[Atlantic (northeast, northwest)]

Pleuronectes ferrugineus (C)
Yellowtail Flounder
VU <sup>162</sup> Albd
Canada, USA
[Atlantic (northeast)]

# Order TETRAODONTIFORMES

# Family BALISTIDAE

Balistes vetula
Queen Triggerfish
VU 147 A2d
[Atlantic (eastern central, southeast, southwest, western central)]

# Family TETRAODONTIDAE

Canthigaster rapaensis VU <sup>147</sup> D2 French Polynesia [Pacific (southwest)] Liosaccus pachygaster VU <sup>147</sup> D2 Taiwan [Pacific (northwest)]

### Class SARCOPTERYGII

### Order COELACANTHIFORMES

#### Family LATIMERIIDAE

Latimeria chalumnae
Coelacanth
EN <sup>116</sup> A2cd, C2b
Comoros, South Africa

[Atlantic (southeast), Indian Ocean (western)]

# Class ARACHNIDA

# Order ARANEAE

# Family LINYPHIIDAE

Troglohyphantes gracilis
Kocevje Subterranean Spider
VU 185 D2
Slovenia
Troglohyphantes similis
Kocevje Subterranean Spider
VU 185 D2

Slovenia

Traglahyphantes spinipes

Kocevje Subterranean Spider

VU 183 D2

Slovenia

# Family LYCOSIDAE

Adelocosa anops
Kauai Cave Wolf Spider
EN <sup>185</sup> B1+2c
USA (Hawaiian Is)

Pardosa diuturna
Glacier Bay Wolf Spider
VU <sup>185</sup> D2
USA

Sosippus placidus
Lake Placid Funnel Wolf Spider
VU 185 D2
USA

### Family PISAURIDAE

Dolomedes plantarius
Great Raft Spider
VU 185 Alace+2ce
Austria, Belarus?, Belgium,
Denmark, France, Georgia?,
Germany, Hungary, Italy, Latvia,
Lithuania, Netherlands, Poland,
Romania, Russia, Slovakia, Sweden

# Family TETRAGNATHIDAE

Meta dolloff
Dolloff Cave Spider
VU 185 D2
USA

### Order OPILIONES

# Family PHALANGODIDAE

Banksula melones
Melones Cave Harvestman
VU 185 A2c
USA



# Order PSEUDOSCORPIONIDA

### Family NEOBISIIDAE

Fissilicreagris imperialis
Empire Cave Pseudoscorpion
VU 185 D2
USA

# Class CHILOPODA

### Order

### **SCOLOPENDROMORPHA**

# Family SCOLOPENDRIDAE

Scolopendra abnormis Serpent Island Centipede VU <sup>131</sup> D2 Mauritius

### Class CRUSTACEA

# Order AMPHIPODA

Family

# ALLÓCRANGONYCTIDAE

Allocrangonyx hubrichti
Central Missouri Cave Amphipod
VU 95 D2
USA

Allocrangonyx pellucidus
Oklahoma Cave Amphipod
VU 95 D2
USA

### Family BOGIDIELLIDAE

Bogidiella bermudensis CR 94 B1+2c Bermuda

# Family CRANGONYCTIDAE

Crangonyx dearolfi
Pennsylvania Cave Amphipod
EN 95 B1+2c
USA

Crangonyx grandimanus Florida Cave Amphipod VU 95 D2 USA

Crangonyx hobbsi
Hobb's Cave Amphipod
VU 95 D2
USA

Stygobromus araeus
Tidewater Interstitial Amphipod
VU 95 D2
USA

Stygobromus arizonensis Arizona Cave Amphipod VU 95 D2 USA Stygobromus balconis
Balcones Cave Amphipod
VU 95 D2
USA

Stygobromus barri Barr's Cave Amphipod VU 95 D2 USA

Stygobromus bifurcatus
Bifurcated Cave Amphipod
VU 95 D2
USA

Stygobromus bowmani
Bowman's Cave Amphipod
VU 95 D2
USA

Stygobromus clantoni Clanton's Cave Amphipod VU 95 D2 USA

Stygobromus conradi
Burnsville Cove Cave Amphipod
VU 95 D2
USA

Stygobromus cooperi
Cooper's Cave Amphipod
VU 95 D2
USA

Stygobromus dejectus
Cascade Cave Amphipod
VU 95 D2
USA

Stygobromus elatus
Elevated Spring Amphipod
VU 95 D2
USA

Stygobromus emarginatus Greenbrier Cave Amphipod VU 95 D2 USA

Stygobromus ephemerus
Ephemeral Cave Amphipod
VU 95 D2
USA

Stygobromus flagellatus
Ezell's Cave Amphipod
VU 95 D2
USA

Stygobromus gradyi Grady's Cave Amphipod VU 95 D2 USA

Stygobromus hadenoecus
Devil's Sinkhole Amphipod
VU 95 D2
USA

Stygobromus harai Hara's Cave Amphipod VU 95 D2 USA

Stygobromus hayi Hay's Spring Amphipod EN 95 B1+2c USA

Stygobromus heteropodus
Pickle Springs Amphipod
VU 95 D2
USA

Stygobromus hubbsi Malheur Cave Amphipod VU 95 D2 USA

Stygobromus identatus
Tidewater Stygonectid Amphipod
VU 95 D2
USA

Stygobromus longipes
Long-legged Cave Amphipod
VU 95 D2
USA

Stygobromus mackenziei Mackenzie's Cave Amphipod VU 95 D2 USA

Stygobromus montanus Mountain Cave Amphipod VU 95 D2 USA

Stygobromus morrisoni Morrison's Cave Amphipod VU <sup>95</sup> D2 USA

Stygobromus mundaus
Bath County Cave Amphipod
VU 95 D2
USA

Stygobromus nortoni
Norton's Cave Amphipod
VU 95 D2
USA

Stygobromus onondagaensis Onondaga Cave Amphipod VU 95 D2 USA

Stygobromus ozarkensis Ozark Cave Amphipod VU 95 D2 USA

Stygobromus parvus
Minute Cave Amphipod
VU 95 D2
USA

Stygobromus pecki Peck's Cave Amphipod EN 95 B1+2c USA

Stygobromus pizzinii Pizzini's Amphipod VU <sup>95</sup> D2 USA

Stygobromus putealis
Wisconsin Well Amphipod
VU 95 D2
USA

Stygobromus reddelli Reddell's Cave Amphipod VU 95 D2 USA

Stygobromus smithii Alabama Well Amphipod VU 95 D2 USA

Stygobromus spinatus Spring Cave Amphipod VU 95 D2 USA

Stygobromus stellmacki Stellmack's Cave Amphipod VU 95 D2 USA

Stygobromus subtilis Subtle Cave Amphipod VU 95 D2 USA

Stygobromus wengerorum Wengeror's Cave Amphipod VU 95 D2 USA

#### Family GAMMARIDAE

Gammarus bousfieldi Bousfield's Amphipod VU 95 D2 USA

Gammarus hyalelloides
Diminutive Amphipod
VU 95 D2
USA

Gammarus pecos Pecos Amphipod VU 95 D2 USA

### Family HADZIIDAE

Pseudoniphargus grandimanus CR 94 B1+2c Bermuda

# Family INGOLFIELLIDAE

Ingolfiella longipes CR 94 B1+2c Bermuda

### Family LILJEBORGIIDAE

Idunella sketi CR 94 B1+2c Bermuda

# Family NIPHARGIDAE

Carinurella paradoxa
VU 159 D2
Italy, Slovenia

Niphargobates lefkodemonaki VU <sup>159</sup> D2 Greece

Niphargobates orophobata VU <sup>159</sup> D2

Slovenia

Niphargus aberrans

VU 159 D2

Slovenia
Niphargus hadzii
VU 159 D2

Slovenia

Niphargus hrabei

VU <sup>159</sup> B1+2bcde

Austria, Croatia, Hungary?,

Romania, Russia?, Slovakia,

Ukraine?, Yugoslavia?

Niphargus sphagnicolus VU <sup>159</sup> D2 Slovenia

Niphargus spoeckeri VU <sup>159</sup> D2 Slovenia

Niphargus stenopus VU 159 D2

Slovenia

Niphargus timavi VU 159 D2 Italy, Slovenia

Niphargus valachicus VU 159 B1+2bcde

Bulgaria, Croatia?, Hungary, Romania, Slovakia, Slovenia, Yugoslavia

### Family ORCHESTIIDAE

Spelaseorchestia kiloana Kaui Cave Amphipod EN <sup>95</sup> B1+2ce USA (Hawaiian Is)

### Family PARAMELITIDAE

Aquadulcaris pheronyx CR <sup>83</sup> B1+3d South Africa Paramelita barnardi
EN 83 B1+2c
South Africa
Paramelita flexa
VU 83 A1c

South Africa

# Family PHOXOCEPHALIDAE

Cocoharpinia iliffei CR 94 B1+2c Bermuda

# Order ANASPIDACEA

# Family ANASPIDIDAE

Allanaspides helonomus Syncarid Shrimp VU 95 D2 Australia

Allanaspides hickmani Syncarid Shrimp VU 95 D2 Australia

Paranaspides lacustris
Great Lake Shrimp
VU 95 D2
Australia

# Family PSAMMASPIDIDAE

Eucrenonaspides oinotheke VU <sup>185</sup> D2 Australia

#### Order ANOMOPODA

### Family CHYDORIDAE

Alona hercegovinae VU <sup>159</sup> D2 Bosnia and Herzegovina

VU <sup>159</sup> D2 Slovenia Alona smirnovi VU <sup>159</sup> D2

Alona sketi

Macedonia

Rhynchochydorus australiensis

Water Flea

VU 95 D2 Australia

### Family DAPHNIIDAE

Daphnia coronata
VU 83 D2
South Africa
Daphnia jollyi
Water Flea
VU 19 D2

Australia



Daphnia nivalis

Water Flea

VU 19 D2

Australia

Daphnia occidentalis

Water Flea

VU 19 D2

Australia

### Order ANOSTRACA

# Family BRANCHINECTIDAE

Branchinecta belki

EN 107 B1+3cd

Mexico

Branchinecta conservatio

Conservancy Fairy Shrimp

EN 95 A2c

USA

Branchinecta longiantenna

Longhorn Fairy Shrimp

EN 95 A2c

USA

Branchinecta lynchi

Vernal Pool Fairy Shrimp

VU 95 A2c

USA

Branchinecta mexicana

CR 107 B1+3d

Mexico

Branchinecta sandiegonensis

San Diego Fairy Shrimp

EN 95 A2c

Mexico, USA

### Family BRANCHIPODIDAE

Parartemia contracta

Brine Shrimp

VU 95 D2

Australia

### Family CHIROCEPHALIDAE

Chirocephalus croaticus

VU 159 B1+2bcde

Croatia, Slovenia

Chirocephalus pelagonicus

VU 159 D2

Macedonia

Chirocephalus reiseri

VU 159 D2

Bosnia and Herzegovina

# Family LINDERIELLIDAE

Dexteria floridana

Florida Fairy Shrimp

CR 95 B1+2c

USA

### Family STREPTOCEPHALIDAE

Streptocephalus dendrophorus

EN 83 B1+2bd

South Africa

Streptocephalus dendyi

EN 83 B1+2bd

South Africa

Streptocephalus gracilis

CR 83 A2c, B1+2bd

South Africa

Streptocephalus guzmani

EN 107 B1+3cd

Mexico

Streptocephalus moorei

CR 107 B1+3d

Mexico

Streptocephalus woottoni

Riverside Fairy Shrimp

EN 95 A2c

Mexico, USA

Streptocephalus zuluensis

EN 83 B1+2bd

South Africa, Zimbabwe

### Family THAMNOCEPHALIDAE

Branchinella alachua

Peninsula Fairy Shrimp

EN 95 B1+2cd

USA

Branchinella apophysata

Fairy Shrimp

VU 95 D2

Australia

Branchinella basispina

Fairy Shrimp

VU 95 D2

Australia

#### Branchinella denticulata

Fairy Shrimp

VU 95 D2

Australia

Branchinella lithaca

Stone Mountain Fairy Shrimp

CR 95 B1+2cd

USA

Branchinella simplex

Brine Shrimp

VU 95 D2

Australia

Branchinella wellardi

Fairy Shrimp VIJ 95 D2

Australia

#### Order CALANOIDA

### Family CENTROPAGIDAE

Boeckella bispinosa

VU 145 D2

Australia

Boeckella calcaris

VU 145 D2

Bolivia, Peru

Boeckella geniculata

VU 145 D2

Australia

Boeckella nvoraensis

VU 145 D2

Australia

Roeckella shieli

VU 145 D2

Australia

Calamoecia australica

VU 145 D2

Australia

Calamoecia elongata

VU 145 D2

Australia

Calamoecia zeidleri

VU 145 D2

Australia

Hemiboeckella powellensis VU 145 D2

Australia

[swamp near L. Powell]

# Family **DIAPTOMIDAE**

Aglaodiaptomus kingsburyae VU 145 D2

USA

Aglaodiaptomus marshianus

VU 145 D2

USA

[L. Jackson] Allodiaptomus satanas

VU 145 D2

India

Arctodiaptomus burduricus

VU 145 D2

Turkey [L. Burdur, L. Solda]

Arctodiaptomus euacanthus

VU 145 D2

India

Arctodiaptomus kamtschaticus

VU 145 D2

[L. Zelonoe]

Arctodiaptomus michaeli

VU 145 D2

India

[L. Alapathar, L. Marsar]

Dussartius baeticus

VU 145 D2

Spain

[R. Quadalquivir]

Eodiaptomus lumholtzi

VU 145 D2 Australia

. . . .

Eodiaptomus shihi VU 145 D2

India

[Ghandisagar Reservoir]

Heliodiaptomus kolleruensis

VU 145 D2

India

Heliodiaptomus pulcher

VU 145 D2

India

Hesperodiaptomus augustaensis

VU 145 D2

USA

Hesperodiaptomus californiensis VU <sup>145</sup> D2

VU 143 D

USA

Lovenula excellens

 $VU^{-83}$  D2

South Africa

Lovenula simplex

VU 145 D2

South Africa

Mastigodiaptomus purpureus

VU 145 D2

Cuba, Haiti?

Metadiaptomus capensis

VU 145 D2

South Africa

Metadiaptomus purcelli

VU 145 D2

South Africa

Neodiaptomus intermedius

VU 145 D2

India

Neodiaptomus laii

VU 145 D2

Malaysia

[Pedu Reservoir and mining pools]

Neodiaptomus lymphatus

VU 145 D2

Indonesia

[L. Tempe]

Neodiaptomus physalipus

VU 145 D2

India

Notodiaptomus dubius

VU 145 D2

Brazil

Notodiaptomus maracaibensis

VU 145 D2

Venezuela
[L. Maracaibo]

Paradiaptomus natalensis

VU 83 D2

South Africa

Phyllodiaptomus wellekensae

VU 145 D2

India

Skistodiaptomus carolinensis

VU 145 D2

USA

[L. Ravenel]

Stygodiaptomus kieferi

VU 159 D2

Bosnia and Herzegovina

Stygodiaptomus petkovskii

VU 159 D2

Bosnia and Herzegovina, Croatia

Thermodiaptomus galeboides

VU 145 D2

Kenya, Tanzania, Uganda

[L. Victoria]

Tropodiaptomus burundensis

VU 145 D2

Burundi

[R. Rusizi valley]

Tropodiaptomus kilimensis VU 145 D2

T- - L

Tanzania

Tropodiaptomus kissi

VU 145 D2

Rwanda

Tropodiaptomus neumanni

VU 145 D1

Kenya

[L. Baringo, L. Naivasha]

Tropodiaptomus simplex

VU 145 D2

Burundi, Tanzania, Zaire

[L. Tanganyika]

Tropodiaptomus stuhlmanni

VU 145 D2

Kenya, Tanzania, Uganda

[L. Victoria]

Family EPACTERISCIDAE

Erebonectes nesioticus

CR 94 B1+2c

Bermuda

Family PLATYCOPIIDAE

Antriscopia prehensilis

CR 94 B1+2c

Bermuda

Nanocopia minuta

CR 94 B1+2c

Bermuda

Family PSEUDOCYCLOPHDAE

Paracyclopia naessi

CR 94 BI+2c

Bermuda

Family TEMORIDAE

Epischura baikalensis

VU 145 D2 Russia

[L. Baikal]

Order CONCHOSTRACA

Family LEPTESTHERIIDAE

Eoleptestheria spinosa

VU 159 B1+2bcd+3c

Croatia, Yugoslavia

Family LIMNADIIDAE

Imnadia banatica

VU 159 D2

Yugoslavia Imnadia cristata

VU 159 D2

Yugoslavia

Imnadia panonica

VU 159 D2

Yugoslavia

Order CYCLOPOIDA

Family CYCLOPIDAE

Acanthocyclops hypogeus

VU 159 D2

Slovenia

Mesocyclops insulensis

VU 145 D2

VU 1∞ D2

Mozambique

[L. Bemapaza]

Metacyclops gasparoi

vu 159 D2

Slovenia

Metacyclops postojnae

VU 159 D2

Slovenia

Tropocyclops federensis

VU 145 D2

Brazil

Tropocyclops nananae

VU 145 D2

Brazil

Family SPELEOITHONIDAE

Speleoithona bermudensis

CR 94 BI+2c

Bermuda



### Order DECAPODA

# Family ASTACIDAE

Astacus astacus

Noble Crayfish

VU 159 B2bce+3bcd

Austria, Belarus, Belgium, Bulgaria,
Cyprus [int], Czech Republic?,
Denmark, Hungary, Italy [int],
Latvia?, Lithuania, Moldova?,
Netherlands, Norway, Poland,
Romania?, Russia, Slovakia,
Sweden, Switzerland [int], Ukraine,
United Kingdom [int], Yugoslavia

Austropotamobius pallipes
White-clawed Crayfish
VU <sup>159</sup> B2bce+3bcd
Austria, Czech Republic?, France,
Germany, Hungary?, Ireland, Italy,
Portugal, Slovakia, Spain,
Switzerland, United Kingdom,
Yugoslavia

Austropotamobius torrentium

Stone Crayfish
VU 159 B2bce+3bcd
Austria, Czech Republic?, France,
Germany, Hungary, Slovakia,
Switzerland, Yugoslavia

Pacifastacus fortis Shasta Crayfish CR <sup>7</sup> B1+2c USA

Pacifastacus nigrescens CR <sup>7</sup> B1+2c USA (ex?)

### Family ATYIDAE

Palaemonias alabamae Alabama Cave Shrimp EN 95 B1+2c USA

Palaemonias ganteri Kentucky Cave Shrimp EN <sup>95</sup> B1+2c USA

Syncaris pacifica
California Freshwater Shrimp
EN 95 Alce
USA

Troglocaris anophthalmus
VU 159 B1+2cde
Bosnia and Herzegovina, Bulgaria,
Croatia, Italy, Slovenia, Yugoslavia

Typhlatya iliffei CR <sup>94</sup> B1+2c Bermuda

Typhlatya monae Mona Cave Shrimp VU 95 D2 Puerto Rico

### Family CAMBARIDAE

Cambarellus blacki
Cypress Crayfish
EN 7 B1+2c
USA
Cambarellus diminutus
Least Crayfish
VU 7 B1+2c
USA

Cambarellus lesliei VU <sup>7</sup> B1+2c USA

Cambarus aculabrum EN <sup>7</sup> B1+2c USA

Cambarus batchi Bluegrass Crayfish VU <sup>7</sup> B1+2c, D1 USA

Cambarus bouchardi Big South Fork Crayfish VU <sup>7</sup> B1+2c, D1 USA

Cambarus catagius
Greenshorn Burrowing Crayfish
VU 7 B1+2c
USA

Cambarus chaugaensis VU <sup>7</sup> B1+2c, D1 USA

Cambarus coosawattae VU <sup>7</sup> B1+2c, D1 USA

Cambarus cryptodytes
Apalachicola Cave Crayfish
VU ' B1+2c
USA

Cambarus cymatilis
VU 7 B1+2c, D1
USA

Cambarus deweesae Valley Flame Crayfish EN <sup>7</sup> B1+2c USA

Cambarus elkensis VU ' B1+2c

Cambarus extraneus Chickamanga Crayfish VU <sup>7</sup> B1+2c USA

Cambarus fasciatus VU ' B1+2c USA

Cambarus georgiae Little Tennessee Crayfish VU <sup>7</sup> B1+2c, D1 USA Cambarus harti
Piedmont Blue Burrower
EN 7 B1+2c
USA

Cambarus hiwasseensis VU <sup>7</sup> B1+2c USA

Cambarus howardi VU <sup>7</sup> B1+2c USA

Cambarus miltus
Rusty Grave Digger
VU 7 B1+2c
USA

Cambarus nerterius VU ' B1+2c, D1 USA

Cambarus obeyensis Obey Crayfish VU <sup>7</sup> B1+2c USA

Cambarus parrishi VU <sup>7</sup> B1+2c, D1 USA

Cambarus pristinus VU <sup>7</sup> B1+2c, D1 USA

Cambarus pyronotus Red-black Crayfish EN <sup>7</sup> B1+2c USA

Cambarus reburrus VU ' B1+2c USA

Cambarus scotti VU <sup>7</sup> B1+2c USA

Cambarus speciosus VU <sup>7</sup> B1+2c, D1 USA

Cambarus spicatus VU <sup>7</sup> B1+2c USA

Cambarus strigosus EN 7 B1+2c USA

Cambarus subterraneus EN <sup>7</sup> B1+2c USA

Cambarus tartarus
Oklahoma Cave Crayfish
CR 7 B1+2c
USA

Cambarus truncatus EN <sup>7</sup> B1+2c USA

USA

Orconectes peruncus Cambarus unestami Hobbseus petilus VU 7 B1+2c Tombigbee Riverlet Crayfish VU 7 B1+2c VU 7 B1+2c USA USA USA Orconectes quadruncus Cambarus veteranus Hobbseus valleculus VU 7 B1+2c VU 7 B1+2c Choctaw Riverlet Crayfish LISA USA VU 7 B1+2c Orconectes saxatilis Cambarus williami Kiamichi Crayfish EN 7 B1+2c Hobbseus valobushensis CR 7 B1+2c USA VU 7 B1+2c, D1 USA Cambarus zophonastes USA Orconectes shoupi Hell Creek Crayfish Orconectes bisectus Nashville Crayfish CR 7 B1+2c Crittenden Crayfish CR 7 B1+2c USA VU 7 B1+2c, D1 USA Distocambarus devexus USA Orconectes sloanii VU 7 B1+2c, D1 Orconectes blacki VU 7 B1+2c USA VU 7 B1+2c, D1 USA Distocambarus youngineri USA Orconectes stannardi VU 7 B1+2c, D1 Orconectes cooperi VU 7 B1+2c USA VU 7 B1+2c, D1 USA Fallicambarus burrisi USA Orconectes wrighti VU 7 B1+2c Orconectes deanae VU 7 B1+2c, D1 USA Conchas Crayfish USA VU 7 B1+2c, D1 Fallicambarus danielae Procambarus acherontis USA Speckled Burrowing Crayfish Orlando Cave Crayfish VU 7 B1+2c Orconectes hartfieldi EN 7 B1+2c USA VU 7 B1+2c **USA** Fallicambarus gilpini Procambarus angustatus VU ' B1+2c, D1 Orconectes holti CR 7 B1+2c VU 7 B1+2c USA USA (ex?) USA Fallicambarus gordoni Procambarus apalachicolae VU 7 B1+2c, D1 Orconectes incomptus VU 7 B1+2c Tennessee Cave Crayfish USA USA VU 7 B1+2c, D1 Fallicambarus harpi Procambarus attiguus USA EN 7 B1+2c Silver Glen Springs Cave Crayfish Orconectes jeffersoni USA CR 7 B1+2c Louisville Crayfish USA Fallicambarus hortoni VU 7 B1+2c, D1 Hatchie Burrowing Crayfish Procambarus barbiger USA Jackson Prarie Crayfish EN 7 B1+2c Orconectes jonesi VU 7 B1+2c USA VU 7 B1+2c LISA Fallicambarus petilicarpus USA Procambarus brazoriensis CR 7 B1+2c Orconectes kentuckiensis Brazoria Crayfish **USA** VU 7 B1+2c VU 7 B1+2c, D1 Fallicambarus strowni USA USA VU 7 B1+2c Orconectes maletae Procambarus cometes LISA VU 7 B1+2c Mississippi Flatwoods Crayfish **USA** Hobbseus attenuatus VU 7 B1+2c, D1 VU 7 B1+2c, D1 Orconectes marchandi **USA** USA VU 7 B1+2c, D1 Procambarus connus **USA** Hobbseus cristatus Corrollton Crayfish VU 7 B1+2c VU 7 B1+2c, D1 Orconectes menae USA VU 7 B1+2c USA USA Hobbseus orconectoides Procambarus delicatus Oktibbeha Riverlet Crayfish Orconectes mississippiensis Big-cheeked Cave Crayfish VU 7 B1+2c VU 7 B1+2c CR 7 B1+2c

USA

USA



Procambarus echinatus VU 7 B1+2c

USA

Procambarus econfinae Panama City Crayfish EN <sup>7</sup> B1+2c USA

Procambarus erythrops

Santa Fe Cave Crayfish EN <sup>7</sup> B1+2c USA

Procambarus escambiensis VU ' B1+2c, D1

USA

Procambarus ferrugineus EN 7 B1+2c

USA

Procambarus füzpatricki Spiny-tail Crayfish

VU 7 B1+2c

USA

Procambarus franzi
Orange Lake Cave Fish
EN 7 B1+2c

USA B1+2c

Procambarus gibbus VU 7 B1+2c

USA

Procambarus horsti
Big Blue Spring Cave Cra

Big Blue Spring Cave Crayfish EN <sup>7</sup> B1+2c USA

Procambarus lagniappe
Lagniappe Crayfish
VU 7 B1+2c

USA
Procambarus latipleurum

VU <sup>7</sup> B1+2c, D1 USA

Procambarus leitheuseri
Coastal Lowland Cave Crayfish
VU ' B1+2c, D1

USA

Procambarus milleri
Miami Cave Crayfish

EN 7 B1+2c USA

Procambarus morrisi
Putnam County Cave Crayfish
CR 7 B1+2ae, C1+2b
USA

Procambarus nechesae VU <sup>7</sup> B1+2c USA

Procambarus nigrocinctus
VU 7 B1+2c, D1
USA

Procambarus nueces

CR <sup>7</sup> B1+2c USA

Procambarus orcinus Woodville Cave Crayfish

VU <sup>7</sup> B1+2c, D1 USA

Procambarus pecki
Phantom Cave Crayfish
VU ' B1+2c
USA

Procambarus pictus
Black Creek Crayfish
VU 7 B1+2c

USA

Procambarus plumimanus VU ' B1+2c USA

Procambarus pogum Bearded Red Crayfish VU <sup>7</sup> B1+2c, D1

Procambarus rathbunae VU <sup>7</sup> B1+2c USA

Procambarus reimeri VU <sup>7</sup> B1+2c, D1 USA

Procambarus steigmani CR 7 B1+2c USA

Procambarus texanus
CR 7 B1+2c
USA

Family GECARCINUCIDAE

Afrithelphusa afzelii CR 95 C2a Sierra Leone

Afrithelphusa gerhildae CR 95 C2b

Guinea

Afrithelphusa leonensis CR 95 C2b

Sierra Leone

Afrithelphusa monodosus

CR 95 C2b Guinea

Globonautes macropus
Tree Hole Crab
CR 95 C2a
Guinea, Liberia

Family HIPPOLYTIDAE

Barbouria cubensis CR 94 B1+2c Bermuda Somersiella sterreri CR <sup>94</sup> B1+2c Bahamas, Bermuda, Cuba, Mexico

Family PALAEMONIDAE

Palaemonetes antrorum Balcones Cave Shrimp EN 95 B1+2c USA

Palaemonetes cummingi
Squirrel Chimney Cave Shrimp
VU 95 D2
USA

Family PARASTACIDAE

Astacoides crosnieri
EN 54 B1+2c
Madagascar
Astacoides petiti
EN 54 B1+2c

Madagascar

Astacopsis gouldi

Giant Tasmanian Lobster

EN 54 Alace, B1+2abce

Australia

Cherax destructor

VU 54 Alde

Australia

Cherax quadricarinatus
VU 54 Alde
Australia

Cherax tenuimanus Marron VU <sup>54</sup> Alde Australia

Engaeus australis
Lilly Pilly Burrowing Crayfish
EN 54 B1+2c
Australia

Engaeus curvisuturus EN <sup>54</sup> B1+2c Australia

Engaeus disjuncticus EN <sup>54</sup> B1+2c Australia

Engaeus granulatus EN <sup>54</sup> B1+2c Australia

Engaeus mallacoota

Mallacoota Burrowing Crayfish
EN 4 B1+2c
Australia

Engaeus martigener
Furneaux Burrowing Crayfish
EN <sup>54</sup> B1+2c

Engaeus nulloporius
EN <sup>54</sup> B1+2c
Australia

Australia

Engaeus orramakunna Mount Arthur Burrowing Crayfish EN 54 B1+2c

Australia

Engaeus phyllocercus Narracan Burrowing Crayfish VU 54 B1+2c

Australia

Engaeus rostrogaleatus Strzelecki Burrowing Crayfish EN 54 B1+2c Australia

Engaeus spinicaudatus Scottsdale Burrowing Crayfish EN 54 B1+2c Australia

Engaeus sternalis Warragul Burrowing Crayfish EN 54 B1+2c Australia

Engaeus urostrictus EN 54 B1+2c Australia

Engaewa similis EN 54 B1+2c Australia

Euastacus armatus Murray River Cray VU 54 Alade Australia

Euastacus bindal EN 54 B1+2c Australia

Euastacus bispinosus Glenelg River Cray VU 54 Alade

Australia Euastacus crassus EN 54 B1+2c Australia

Euastacus diversus EN 54 B1+2c Australia

Euastacus eungella VU 54 B1+2c

Australia Euastacus fleckeri

VU 54 B1+2c Australia

Euastacus hystricosus VU 54 B1+2c Australia

Euastacus jagara EN 54 B1+2c Australia

Euastacus maidae EN 54 B1+2c Australia

Euastacus monteithorum

EN 54 B1+2c Australia

Euastacus neodiversus

VU 54 B1+2c Australia

Euastacus robertsi EN 54 B1+2c

Australia

Euastacus setosus VU 54 B1+2c

Australia

Euastacus urospinosus EN <sup>54</sup> B1+2c

Australia Euastacus yigara

EN 54 B1+2c Australia

Family PINNOTHERIDAE

Parapinnixa affinis Californian Bay Pea Crab EN 95 Alc USA

Family POTAMONAUTIDAE

Louisea edeaensis CR 95 B1+2c Cameroon

Family PROCARIDIDAE

Procaris chacei CR 94 B1+2c Bermuda

Order HALOCYPRIDA

Family HALOCYPRIDIDAE

Spelaeoecia bermudensis CR 94 B1+2c Bermuda

Order HARPACTICOIDA

Family AMEIRIDAE

Nitocrella slovenica VU 159 D2 Slovenia

Nitocrella stochi VU 159 D2 Italy

Family CANTHOCAMPTIDAE

Canthocamptus dedeckkeri VU 145 D2

Australia

Canthocamptus echinopyge VU 145 D2

Australia

Canthocamptus longines

VU 145 D2 Australia

Canthocamptus mammillifurca

VU 145 D2

Canthocamptus sublaevis

VU 145 D2

Canthocamptus tasmaniae

VU 145 D2 Australia

Ceuthonectes rouchi

VU 159 D2 Slovenia

Elaphoidella amabilis

VU 145 D2 USA

Elaphoidella franci VU 159 D2 Slovenia

Elaphoidella jeanneli VU 159 D2

Slovenia Elaphoidella kieferi VU 159 D2 Slovenia

Fibulacamptus bisetosus

VU 145 D2 Australia

Fibulacamptus gracilior

VU 145 D2 Australia [R. Werribee]

Paramorariopsis anae VU 159 D2

Slovenia

Pseudomoraria triglavensis

VU 159 D2 Slovenia

Family DARCYTHOMPSONIIDAE

Leptocaris stromatolicola

ŶU 145 D2 Mexico

Order ISOPODA

Family ANTHURIDAE

Currassanthura bermudensis

CR 94 B1+2c Bermuda

Family ASELLIDAE

Caecidotea barri Clifton Cave Isopod EN 95 B1+2c USA



Caecidotea macropoda

Bat Cave Isopod VU 95 D2 **USA** 

Caecidotea nickajackensis Nickajack Cave Isopod

VU 95 D2 USA

Lirceus culveri

Rye Cove Cave Isopod

VU 95 D2

USA

Lirceus usdagalun Lee County Cave Isopod

EN 95 B1+2c USA

Proasellus parvulus

VU 159 D2

Proasellus slovenicus

VU 159 D2 Slovenia

Family ATLANTASELLIDAE

Atlantasellus cavernicolus

CR 94 B1+2c Bermuda

Family CIROLANIDAE

Antrolana lira

Madison Cave Isopod

VU 95 D2 USA

Arubolana imula

VU 95 D2 Aruba

Bermudalana aruboides

CR 94 B1+2c Bermuda

Mexilana saluposi VU 95 D2

Speocirolana thermydromis

EN 95 Alc Mexico

Mexico

Sphaerolana affinis

EN 95 Alc Mexico

Sphaerolana interstitialis

EN 95 Alc Mexico

Sphaerolana karenae

VU 95 D2 Mexico

Family PHREATOICIDAE

Onchotelson brevicaudatus

VU 95 D2 Australia

Onchotelson spatulatus

VU 95 D2 Australia

Uramphisopus pearsoni

VU 95 D2 Australia

Family SPHAEROMATIDAE

Monolistra bolei EN 159 B1+2c

Slovenia

Monolistra calopyge

VU 159 D2

Monolistra schottlaenderi

VU 159 D2

Monolistra spinosissima

EN 159 B1+2bce

Thermosphaeroma cavicauda

CR 95 B1+2c

Thermosphaeroma dugesi

CR 95 B1+2c

Mexico Thermosphaeroma macrura

CR 95 B1+2c

Mexico

Thermosphaeroma milleri

EN 95 B1+2c

Thermosphaeroma smithi

CR 95 B1+2c

Mexico Family STENASELLIDAE

Mexistenasellus coahuila

EN 95 A1c Mexico, USA

Mexistenasellus nulemex

VU 95 D2

Mexico

Mexistenasellus parzefalli

Parzefall's Stenasellid

VU 95 D2 Mexico

Mexistenasellus wilkensi

Wilken's Stenasellid

VU 95 D2 Mexico

Family TRICHONISCIDAE

Calconiscellus gotscheensis

VU 159 D2 Slovenia

Haplophthalmus abbreviatus

VU 159 D2 Slovenia

Haplophthalmus rhinoceros

VU 159 D2

Slovenia

Metatrichoniscoides celticus

VU 77 D2 United Kingdom

Moserius percoi VU 159 D2

Slovenia

Order MICTACEA

Family MICTOCARIDIDAE

Mictocaris halope

CR 94 B1+2c

Bermuda

Order MISOPHRIOIDA

Family MISOPHRIIDAE

Speleophria bivexilla

CR 94 B1+2c

Bermuda

Speleophria scottodicarloi

CR 94 B1+2c

Bermuda

Order MYODOCOPIDA

Family CYPRIDINIDAE

Zonocypretta kalimna

Seed Shrimp VU 95 D2

Australia

Order MYSIDACEA

Family MYSIDAE

Bermudamysis speluncola

CR 94 B1+2c Bermuda

Platyops sterreri

CR 94 B1+2c

Bermuda

USA

Order NOTOSTRACA

Family TRIOPSIDAE

Lepidurus packardi EN 95 A2c

Order PODOCOPIDA

Family CYPRIDIDAE

Kapcypriodopsis barnardi

CR 95 Ala South Africa

Pseudocandona aemonae

VU 159 D2 Slovenia

Pseudocandona cavicola

VU 159 D2 Slovenia

Pseudocandona pretneri

VU 159 D2 Slovenia

Pseudocandona trigonelia

VU 159 D2 Slovenia

Family LIMNOCYTHERIDAE

Leucocythere helenae

VU 95 D2 South Africa

Limnocythere porphyretica

Seed Shrimp VU 95 D2 Australia

Family NOTODROMADIDAE

Newnhamia fuscata

Seed Shrimp
VU 95 D2
Australia

Newnhamia insolita

Seed Shrimp VU 95 D2 Australia

Class INSECTA

Order ANOPLURA

Family HAEMATOPINIDAE

Haematopinus oliveri
Pygmy Hog Sucking Louse
CR <sup>185</sup> Alc, B1+2cd, E
India

Order COLEOPTERA

Family ANTHICIDAE

Anthicus sacramento Sacramento Beetle EN <sup>185</sup> B1+2c USA

Family BUPRESTIDAE

Buprestis splendens

Goldstreifiger
VU 185 A1c
Albania, Austria, Belarus?,
Denmark?, Finland, Greece, Poland?,
Russia?, Spain, Sweden?,
Yugoslavia?

Family CARABIDAE

Carabus olympiae VU 185 Alacd+2c

France [int], Italy

Elaphrus viridis
Delta Green Ground Beetle
CR <sup>185</sup> B1+2abc+3a

USA

Family CERAMBYCIDAE

Cerambyx cerdo

Cerambyx Longicorn

VU <sup>185</sup> Alc+2c
Algeria, Armenia?, Austria,
Azerbaijan?, Czech Republic,
France, Georgia?, Germany,
Hungary, Iran, Moldova?, Morocco,
Poland, Spain, Sweden, Switzerland,
Tunisia, Turkey?, Ukraine, United
Kingdom?

Macrodontia cervicornis

VU 185 A1c Brazil, Peru

Morimus funereus

VU 185 Alc Belgium?, Czech Republic?, Germany?, Hungary, Moldova, Romania, Slovakia?, Ukraine, Yugoslavia

Rosalia alpina

Rosalia Longicorn

VU 185 Alc Algeria, Armenia, Austria, Azerbaijan, Bulgaria, Czech Republic, Denmark?, France, Georgia, Germany, Greece, Hungary, Iran?, Israel, Italy, Jordan?, Lebanon?, Liechtenstein, Morocco, Netherlands, Poland, Portugal, Romania, Russia?, Spain, Sweden, Switzerland, Syria, Tunisia, Ukraine, Yugoslavia

Family CICINDELIDAE

Cicindela columbica

Columbia River Tiger Beetle
VU 185 A1c+2c

USA

Cicindela puritana Puritan Tiger Beetle

EN 75 A1bc, B2cd+3c-USA

Family CUCUJIDAE

Cucujus cinnaberinus

VU <sup>185</sup> Alc Austria, Czech Republic?, Estonia?, Finland, Germany, Hungary, Latvia?, Lithuania, Norway, Poland, Romania, Russia, Slovakia, Sweden, Yugoslavia Family CURCULIONIDAE

Gymnopholus lichenifer Lichen Weevil VU <sup>185</sup> Alc+2cd, D2

Papua New Guinea

Family DYTISCIDAE

Acilius duvergeri

VU 67 B1+2b

Algeria, Italy, Morocco, Portugal, Spain

Agabus clypealis

EN 67 B1+2b

Denmark, Germany, Poland, Russia, Sweden

Agabus discicollis

EN 67 B1+2c Ethiopia

Agabus hozgargantae EN 67 B1+2c

Spain

Deronectes aljibensis

EN 67 B1+2c Spain

Deronectes depressicollis

VU 67 B1+2c Spain

Deronectes ferrugineus

VU 67 B1+2c Portugal

Dytiscus latissimus

VU 62 A2c, B1+2a
Austria, Belarus, Belgium (ex),
Bosnia and Herzegovina, Croatia
(ex?), Czech Republic, Denmark,
Finland, France (ex), Germany (ex),
Hungary (ex?), Italy, Latvia,
Luxembourg (ex), Netherlands (ex),
Norway, Poland, Romania (ex?),
Russia, Slovakia (ex?), Sweden,
Switzerland (ex?), Ukraine

Graptodytes delectus

EN 67 B1+2c Spain (Canary Is)

Hydrotarsus compunctus

CR <sup>67</sup> B1+2c Spain (Canary Is)

Hydrotarsus pilosus

EN 67 B1+2c Spain (Canary Is)

Meladema imbricata

CR <sup>67</sup> Alc Spain (Canary Is)

Meladema lanio

VU <sup>67</sup> B1+2b Portugal (Madeira)

Rhantus alutaceus EN 67 A2c

EN 67 A2c New Caledonia



Rhithrodytes agnus EN 67 B1+2c Portugal

# Family ELMINTHIDAE

Stenelmis gammoni
Gammon's Riffle Beetle
VU 185 D2
USA
[R. South Fork New]

### Family LEIODIDAE

Glacicavicola bathysciodes
Blind Cave Beetle
VU 185 B1+2c
USA

### Family LUCANIDAE

Colophon barnardi EN <sup>18</sup> B1+2e South Africa

Colophon berrisfordi CR <sup>18</sup> B1+2e South Africa

Colophon cameroni VU <sup>18</sup> B1+2e South Africa

Colophon cassoni CR <sup>18</sup> B1+2e South Africa

Colophon eastmani EN 18 B1+2e South Africa

Colophon haughtoni EN 18 B1+2e South Africa

Colophon montisatris
CR <sup>18</sup> B1+2e
South Africa

Colophon neli
VU 18 B1+2e
South Africa

Colophon primosi CR <sup>18</sup> B1+2e South Africa

Colophon stokoei VU <sup>18</sup> B1+2e South Africa

Colophon thunbergi EN <sup>18</sup> B1+2e South Africa

Colophon westwoodi
VU 18 B1+2e
South Africa

Colophon whitei
EN <sup>18</sup> B1+2e
South Africa

# Family SCARABAEIDAE

Aegialia concinna Ciervo Scarab Beetle VU <sup>185</sup> D2 USA

Aegialia crescenta
Cresent Dune Scarab Beetle
VU 185 D2
USA

Osmoderma eremita Hermit Beetle

VU 185 A1c
Austria, Belarus?, Belgium, Czech
Republic, Denmark, Estonia?,
Finland, France, Germany, Greece,
Hungary, Italy, Latvia, Liechtenstein,
Lithuania?, Moldova?, Netherlands,
Norway, Poland, Russia, Slovakia,
Spain, Sweden, Switzerland,
Ukraine, Yugoslavia

Prodontria lewisi Cromwell Chafer CR <sup>185</sup> B1+2c New Zealand

Pseudocotalpa giulianii
Giuliani's Dune Scarab Beetle
VU 185 D2
USA

### Family SILPHIDAE

Nicrophorus americanus American Burying Beetle CR <sup>185</sup> Alc Canada (ex), USA

### Family TENEBRIONIDAE

Coelus globosus
Globose Dune Beetle
VU 185 A1c
Mexico, USA

Coelus gracilis
San Joaquin Dune Beetle
VU 185 A1c, D2
USA

Polposipus herculeanus
Frigate Island Giant Tenebrionid
Beetle
CR 185 B1+2c
Seychelles

### Order DERMAPTERA

# Family LABIDURIDAE

Labidura herculeana Saint Helena Earwig CR <sup>185</sup> B1+2a St Helena

### Order DIPTERA

# Family BLEPHAROCERIDAE

Edwardsina gigantea Giant Torrent Midge EN <sup>185</sup> B1+2c Australia

Edwardsina tasmaniensis
Tasmanian Torrent Midge
CR <sup>185</sup> A2c, B1+2c
Australia
[R. Dennison]

### Family PSYCHODIDAE

Nemapalpus nearcticus Sugarfoot Moth Fly EN <sup>185</sup> B1+2abcd USA

# Family TABANIDAE

Brennania belkini
Belkin's Dune Tabanid Fly
VU 185 A2ce
Mexico, USA

# Order EPHEMEROPTERA

# Family SIPHLONURIDAE

Tasmanophlebia lacus-coerulei Large Blue Lake Mayfly VU <sup>185</sup> D2 Australia

### Order GRYLLOBLATTARIA

### Family GRYLLOBLATTIDAE

Grylloblatta chirurgica
Mount St Helens' Grylloblattid
VU <sup>185</sup> A1c+2c, D2
USA

### Order HYMENOPTERA

# Family FORMICIDAE

Acanthomyops latipes VU <sup>163</sup> D2 USA

Acanthomyops murphyi VU <sup>163</sup> D2 USA

Adetomyrma venatrix CR <sup>163</sup> B1+2c Madagascar

Anergates atratulus
VU 163 D2
France, Germany, Greece, Italy,
Spain, Switzerland

Aneuretus simoni Sri Lankan Relict Ant CR 163 B1+2c Sri Lanka

Anoplolepis nuptialis VU 163 D2

South Africa

Antichthonidris bidentatus VU 163 D2 Argentina

Aphaenogaster bidentatus VU 163 D2 USA

Camponotus universitatis VÚ 163 D2 France, Switzerland

Cardiocondyla zoserka VU 163 D2 Nigeria

Cataglyphis hannae VU 163 D2 Tunisia

Chalepoxenus brunneus VU 163 D2

Algeria, Morocco Chalepoxenus kutteri VU 163 D2 France

Chalepoxenus muellerianus VU 163 D2 Italy

Chalepoxenus spinosus VU 163 D2 Kazakhstan

Chalepoxenus tarbinskii VU 163 D2 Kyrgyzstan

Chalepoxenus tauricus VU 163 D2 Ukraine

Chalepoxenus tramieri VU 163 D2 Morocco

Chalepoxenus zabelini VU 163 D2 Turkmenistan

Conomyrma medeis VU 163 D2 USA

Conomyrma reginicola VU 163 D2 USA

Crematogaster atilanica VU 163 D2 Guatemala

Crematogaster creightoni VU 163 D2 USA

Doronomyrmex goesswaldi VU 163 D2 Germany

Doronomyrmex kutteri VU 163 D2

Germany

Doronomyrmex pacis

VU 163 D2 Switzerland

Doronomyrmex pocahontas

VU 163 D2 Canada

Epimymra adlerzi VU 163 D2

Greece

Epimyrma africana

VU 163 D2 Algeria

Epimyrma algeriana VU 163 D2

Algeria

Epimyrma bernardi VU 163 D2

Spain

Epimyrma corsica

VU 163 D2 France

Epimyrma goridaghini VU 163 D2

Russia

Epimyrma kraussei VU 163 D2

Italy

Epimyrma ravouxi

VU 163 D2 France

Epimyrma stumperi

VU 163 D2 Switzerland

Epimyrma tamarae VU 163 D2

Georgia

Epimyrma zaleskyi

VU 163 D2 Czech Republic

Formica dirksi VU 163 D2 USA

Formica talbotae VU 163 D2

USA

Formicoxenus chamberlini VU 163 D2

USA

Formicoxenus nitidulus

VU 163 A2c

Austria, Denmark, Finland, France, Germany, Italy, Norway, Poland, Sweden, Switzerland

Formicoxenus provancheri

VU 163 D2 Canada, USA

Formicoxenus quebecensis

VU 163 D2 Canada

Formicoxenus sibiricus

VU 163 D2 Russia

Harapgoxenus zaisanicus VU 163 D2

Mongolia

Harpagoxenus canadensis

VU 163 D2 Canada, USA

Harpagoxenus sublaevis

VU 163 A2c

Austria, France, Germany, Italy, Switzerland

Kyidris media VU 163 D2

Papua New Guinea

Kyidris yaleogyna VU 163 D2

Papua New Guinea

Lasius reginae VU 163 A2c Austria

Leptothorax buschingeri

VU 163 D2 Switzerland

Leptothorax duloticus VU 163 D2

Leptothorax ergatogyna VU 163 D2

France Leptothorax faberi

VU 163 D2 Canada

Leptothorax minutissimus VU 163 D2

USA

Manica parasitica VU 163 D2

Megalomyrmex symmetochus

VU 163 D2

Monomorirm noualhieri

VU 163 D2 Algeria



Monomorium effractor VU 163 D2 India Monomorium hospitum VU 163 D2 Singapore Monomorium inquilinum VU 163 D2 Mexico Monomorium pergandei VU 163 D2 USA Monomorium santschii VU 163 D2 Monomorium talbotae VU 163 D2 USA Myrmecia inquilina VU 163 D2 Australia Myrmecoxenus gordiagini VU 163 D2 Russia, Yugoslavia Myrmica bibikoffi VU 163 D2 Switzerland Myrmica colax VU 163 D2 USA Myrmica ereptrix VU 163 D2 India Myrmica faniensis VU 163 D2 Belgium Myrmica hirsuta VIJ 163 D2 United Kingdom Myrmica kabylica VU 163 D2 Algeria Myrmica lampra VU 163 D2 Canada Myrmica laurae VU 163 D2 Italy Myrmica lemasnei VU 163 D2 France, Spain Myrmica myrmicoxena

VU 163 D2

Switzerland

VU 163 D2

Canada

Myrmica quebecensis

Myrmica samnitica VU 163 D2 Italy Myrmica symbiotica VU 163 D2 Italy Myrmica winterae VU 163 D2 Switzerland Nothomyrmecia macrops Australian Ant CR 163 B1+2c Australia Oxyepoecus bruchi VU 163 D2 Argentina Oxyepoecus daguerrei VU 163 D2 Argentina Oxyepoecus inquilina VU 163 D2 Argentina Parapheidole oculta VU 163 D2 Madagascar Pheidole acutidens VU 163 D2 Argentina Pheidole argentina VU 163 D2 Argentina Pheidole elecebra VII 163 D2 USA Pheidole inquilina VU 163 D2 USA Pheidole lanuginosa VU 163 D2 India Pheidole microgyna VU 163 D2 Guyana Pheidole neokohli VU 163 D2 Zaire Pheidole parasitica VU 163 D2 India Pheidole symbiotica VU 163 D2 Argentina Plagiolepis ampeloni VU 163 D2 Austria

Plagiolepis grassei VU 163 D2 Plagiolepis regis VU 163 D2 Russia Pogonomyrmex anergismus VU 163 D2 USA Pogonomyrmex colei VU 163 D2 USA Polyergus breviceps VU 163 D2 Polyergus lucidus VU 163 D2 USA Polyergus nigerrimus VU 163 D2 Russia Polyergus samurai VU 163 D2 Japan Protomognathus americanus VU 163 D2 USA Pseudoatta argentina VU 163 D2 Argentina Pseudomyrmex leptosus VU 163 D2 USA Rhoptromyrmex mayri VU 163 D2 India Rhoptromyrmex schmitzi VU 163 D2 Rossomrymex proformicarum VU 163 D2 Russia Rossomyrmex minuchae VU 163 D2 Spain Serrastruma inquilina VU 163 D2 Solenopsis acuminata VU 163 D2 Argentina Solenopsis daguerrei VU 163 D2 Argentina, Uruguay Solenopsis solenopsidis VU 163 D2 Argentina

Strongylognathus afer
VU 163 D2
Algeria
Strongylognathus alboini
VU 163 D2
Italy
Strongylognathus alpinus
VU 163 D2
Switzerland

Strongylognathus arnoldii VU <sup>163</sup> D2 Russia

Strongylognathus caecilia VU <sup>163</sup> D2 Spain

Strongylognathus cecconii VU <sup>163</sup> D2 Italy

Strongylognathus chelifer
VU 163 D2
Puccia

Strongylognathus christophi VU 163 D2

Strongylognathus dalmaticus VU <sup>163</sup> D2 Croatia

Strongylognathus destefanii VU 163 D2 Italy

Strongylognathus emeryi VU 163 D2 Italy

Strongylognathus foreli VU 163 D2 Algeria

Strongylognathus huberi VU <sup>163</sup> D2 Italy, Switzerland

Strongylognathus insularis VU <sup>163</sup> D2 Italy

Strongylognathus italicus VU 163 D2

Strongylognathus karawajevi VU 163 D2

Strongylognathus kervillei VU <sup>163</sup> D2 Turkey

Strongylognathus koreanus
VU 163 D2
North Korea, South Korea

Strongylognathus kratochvilli VU <sup>163</sup> D2 Czech Republic Strongylognathus minutus VU 163 D2

Turkmenistan

Strongylognathus palaestinensis VU 163 D2

lsrael

Strongylognathus pisarskii VU <sup>163</sup> D2 Italy

Strongylognathus rehbinderi VU 163 D2

Georgia Strongylognothus ruzskyi

VU 163 D2

Strongylognathus silvestrii VU 163 D2

Greece

Strumigenys xenos
VU 163 D2
Australia, New Zealand

Teleutomyrmex kutteri

VU 163 D2 Spain

Teleutomyrmex schneideri VU 163 D2

France, Switzerland

Tetramorium microgyna VU 163 D2

South Africa, Zimbabwe Tetramorium parasiticum

VU 163 D2 South Africa

Order LEPIDOPTERA

Family HESPERIIDAE

Hesperia dacotae Dakota Skipper VU <sup>185</sup> A1c+2c Canada, USA

Family LASIOCAMPIDAE

Phyllodesma ilicifolia Small Lappet Moth VU <sup>185</sup> A1c Austria?, Belarus?, Bel Czech Republic?, Denr

Austria?, Belarus?, Belgium, China, Czech Republic?, Denmark, Estonia?, Finland, France, Germany, Italy?, Japan, Kazakhstan?, Latvia?, Lithuania?, Mongolia?, Norway?, Poland, Romania, Russia, Slovakia?, Spain?, Sweden, Switzerland?, Ukraine?

Family LYCAENIDAE

Acrodipsas illidgei Illidge's Ant-blue EN <sup>75</sup> B1+2c Australia Agriades zullichi EN 75 B1+2c

Spain

Alaena margaritacea VU 75 D2

Aloeides caledoni VU <sup>75</sup> D2 South Africa

South Africa

Aloeides carolynnae VU <sup>75</sup> D2 South Africa

Aloeides dentatis VU 75 D2 Lesotho, South Africa

Aloeides egerides VU <sup>75</sup> B1+2c South Africa

Aloeides kaplani VU <sup>75</sup> D2 South Africa

Aloeides lutescens VU 75 D2 South Africa

Aloeides merces VU <sup>75</sup> D2 South Africa

Aloeides nollothi VU 75 D2 South Africa

Aloeides nubilus VU <sup>75</sup> D2 South Africa

Aloeides pringlei VU 75 D2 South Africa

Aloeides rossouwi VU <sup>75</sup> D2 South Africa

Arawacus aethesa EN <sup>75</sup> B1+2c Brazil

Aslauga australis VU 75 D2 South Africa

Capys penningtoni VU 75 D2 South Africa

Chrysoritis cotrelli CR <sup>75</sup> B1+2c South Africa

Cyanophrys bertha VU <sup>75</sup> B1+2c Brazil

Erikssonia acraeina VU <sup>75</sup> D2 South Africa, Zaire, Zambia



Iolaus Iulua
White Spotted Sapphire
VU '5 D2
South Africa

Joiceya praeclarus EN 75 B1+2c

Brazil

Lepidochrysops badhami VU 75 D2 South Africa

Lepidochrysops balli VU <sup>75</sup> D2 South Africa

Lepidochrysops jefferyi VU <sup>75</sup> D2 South Africa

Lepidochrysops littoralis VU <sup>75</sup> D2 South Africa

Lepidochrysops loewensteini VU <sup>75</sup> D2 South Africa

Lepidochrysops lotana CR <sup>75</sup> B1+2c South Africa

Lepidochrysops oosthuizen VU <sup>75</sup> D2 South Africa

Lepidochrysops outeniqua VU 75 D2 South Africa

Lepidochrysops penningtoni VU <sup>75</sup> D2 South Africa

Lepidochrysops pephredo VU <sup>75</sup> D2 South Africa

Lepidochrysops poseidon VU 75 D2

Lepidochrysops pringlei VU 75 D2 South Africa

South Africa

South Africa

Lepidochrysops quickelbergei VU 75 D2

Lepidochrysops swanepoeli
VU 75 D2
South Africa

Lepidochrysops titei VU <sup>75</sup> B1+2c South Africa

Lepidochrysops victori VU <sup>75</sup> D2 South Africa Lepidochrysops wykehami VU 75 D2 South Africa

Lycaena hermes Hermes Copper VU 75 D2 Mexico, USA

Nirodia belphegor EN <sup>75</sup> B1+2c Brazil

Orachrysops ariadne
VU 75 D2
South Africa

Orachrysops niobe EN <sup>75</sup> B1+2c South Africa

Oxychaeta dicksoni Dickson's Copper EN 75 B1+2c South Africa

Paralucia spinifera
Bathurst Copper
EN <sup>25</sup> B1+2c
Australia

Phasis pringlei VU 75 D2 South Africa

Poecilmitis adonis
VU 75 D2
South Africa

Poecilmitis azurius
VU 75 D2
South Africa

Poecilmitis balli VU 75 D2 South Africa

Poecilmitis daphne
VU 75 D2
South Africa

Paecilmitis endymion VU <sup>75</sup> D2 South Africa

Poecilmitis henningi VU <sup>75</sup> D2 South Africa

Poecilmitis hyperion VU <sup>75</sup> D2 South Africa

Paecilmitis irene VU <sup>75</sup> D2 South Africa

Poecilmitis kaplani VU <sup>75</sup> D2 South Africa Poecilmitis lyncurium
Tsomo River Copper
VU <sup>75</sup> D2
South Africa

Poecilmitis lyndseyae VU <sup>75</sup> D2 South Africa

Poecilmitis orientalis VU <sup>75</sup> D2 South Africa

Poecilmitis penningtoni VU <sup>75</sup> D2 South Africa

Poecilmitis pyramus
VU 75 D2
South Africa

Poecilmitis rileyi EN 75 B1+2c South Africa

Poecilmitis stepheni VU <sup>75</sup> D2 South Africa

Poecilmitis swanepoeli EN <sup>75</sup> B1+3d South Africa

Poecilmitis trimeni VU 75 D2 South Africa

Poecilmitis wykehami VU <sup>75</sup> D2 South Africa

Polyommatus galloi Higgin's Anomalous Blue EN <sup>75</sup> B1+2c Italy

Polyommatus golgus Sierra Nevada Blue EN 75 B1+2c Spain

Polyommatus humedasae Piedmont Anomalous Blue CR <sup>75</sup> B1+2ce Italy

Strymon avalona Avalon Hairstreak VU <sup>75</sup> D2 USA

Thestor compassbergae VU 75 D2 South Africa

Thestor dryburghi VU 75 D2 South Africa Thestor kaplani

Kaplan's Thestor
VU 75 D2
South Africa

Thestor pringlei

VU 75 D2

South Africa

Thestor rossauwi

VU 75 D2

South Africa

Thestor stepheni

VU 75 D2

South Africa

Thestor strutti

VU 75 D2

South Africa

Thestor swanepoeli

VU 75 D2

South Africa

Thestor tempe

VU 75 D2

South Africa

Thestor yildizae

VU 75 B1+2c

South Africa

Trimenia wallengrenii

Wallengren's Copper

EN 75 B1+2c

South Africa

### Family NYMPHALIDAE

Amauris comorana

Comoro Friar

EN 105 B1+2c, C2b

Comoros

Amauris nossima

Madagascan Friar

VU 105 B1+2c

Comoros, Madagascar, Mayotte

Amauris phoedon

Mauritian Friar

VU 105 B1+2c

Mauritius

Boloria acrocnema

Uncompange Fritillary Butterfly

VU 185 D2

USA

Euploea albicosta

Biak Dark Crow

EN 105 B1+2c

Indonesia

Euploea andamanensis

Andaman Crow

VU 105 B1+2c

India (Andaman & Nicobar 1s),

Myanmar

Euploea caespes

Murphy's Crow EN 105 B1+2c, C2a

Indonesia

Euploea cordelia

Cordelia's Crow

VU 105 B1+2c

Indonesia

Euploea euphon

Mascarene Crow

VU 105 B1+2c

Mauritius (ex) (Rodrigues), Réunion

Euploea lacon

Spartan Crow

VU 105 B1+2c

Papua New Guinea

Euploea magou

the Magou

VU 105 B1+2c

Indonesia

Euploea mitra

Seychelles Crow

EN 105 BI+2c

Seychelles

Euploea scherzeri

Nicobar Crow

VU 105 B1+2c

India (Andaman & Nicobar Is)

Euploea tripunctata Biak Threespot Crow

EN 105 B1+2c Indonesia

Heliconius nattereri

Natterer's Longwing

CR 185 B1+2c

Brazil

Idea electra

Electra's Tree-nymph

VU 105 B1+2c

Philippines

Idea tambusisiana

Bedford-Russell's Tree-nymph

VU 105 B1+2c

Indonesia

Ideopsis hewitsonii

Hewitson's Small Tree-nymph

EN 105 BI+2c

Indonesia

Ideopsis oberthurii

VU 105 B1+2c

Indonesia

Parantica clinias

New Ireland Yellow Tiger

VU 105 B1+2c

Papua New Guinea

Parantica dabrerai

D'Abrera's Tiger VU 105 B1+2c

Indonesia

Parantica dannatti

Dannatt's Tiger

VU 105 B1+2c

Philippines

Parantica davidi

David's Tiger

CR 105 A1c, B1+2abde, C2b

Philippines

Parantica garamantis

Angled Tiger

VU 105 BI+2c

Papua New Guinea, Solomon Islands

Parantica hypowattan

Morishita's Tiger

VU 105 BI+2c

Indonesia

Parantica kuekenthali

Kuekenthal's Yellow Tiger

EN 105 B1+2c

Indonesia

Parantica marcia

Biak Tiger EN 105 B1+2c

Indonesia

Parantica milagros

Milagros' Tiger EN 105 B1+2c

**Philippines** 

Parantica philo

Sumbawa Tiger

VU 105 BI+2c Indonesia

Parantica phyle

Felder's Tiger

VU 105 B1+2c

**Philippines** 

Parantica schoenigi Father Schoenig's Chocolate

EN 105 BI+2c

Philippines

Parantica sulewattan

Bonthain Tiger

EN 105 BI+2c Indonesia

Parantica timorica

Timor Yellow Tiger

EN 105 B1+2c

Indonesia

Parantica toxopei

Toxopeus' Yellow Tiger VU 105 B1+2c

Indonesia

Parantica wegneri

Flores Tiger

VU 105 BI+2c

Indonesia



Tiradelphe schneideri Schneider's Surprise EN <sup>105</sup> B1+2c Solomon Islands

Tirumala euplaeomorpha Crow Tiger VU 105 B1+2c

Solomon Islands

Family PAPILIONIDAE

Atrophaneura atropos VU 75 AIc, D2 Philippines Atrophaneura jophon

Sri Lankan Rose CR <sup>75</sup> B1+2ac Sri Lanka

Atrophaneura luchti VU <sup>75</sup> D2 Indonesia

Atrophaneura schadenbergi VU 75 A1c+2c

Philippines

Battus zetides
Zetides Swallowtail
VU 75 AIc, B1+2c
Dominican Republic, Haiti

Bhutanitis ludlowi Ludlow's Bhutan Swallowtail

VU 75 D2 Bhutan

Eurytides iphitas
Yellow Kite Swallowtail
VU 75 Alce

Brazil

Eurytides marcellinus

Jamaican Kite

VU 75 B2bc+3d Jamaica

Graphium epaminondas
Andamans Swordtail
VU 75 A2e

India (Andaman & Nicobar Is)

Graphium idaeoides

VU 75 A2c Philippines

Graphium levassori EN 75 B1+2c Comoros

Graphium meeki Meek's Graphium

VU 75 B1+2cd Papua New Guinea, Solomon Islands

Graphium megaera VU <sup>75</sup> A2c Philippines Graphium procles VU 75 A2c, D2

Malaysia

Graphium sandawanum EN 75 B1+2ac

Philippines

Graphium stresemanni VU 75 B1+2ad Indonesia

Ornithoptera aesacus VU <sup>75</sup> D2 Indonesia

Ornithoptera alexandrae
Queen Alexandra's Birdwing
EN 75 B1+2c
Papua New Guinea

Ornithoptera croesus EN <sup>75</sup> B1+2c Indonesia

Ornithoptera meridionalis EN <sup>75</sup> B1+2c Indonesia, Papua New Guinea

Ornithoptera rothschildi Rothschild's Birdwing VU 75 D2

Indonesia

Papilio aristophontes
EN 75 B1+2c
Comoros

Papilio carolinensis VU 75 D2 Philippines

Papilio chikae EN <sup>75</sup> B1+2e Philippines

Papilio esperanza
VU 75 D2
Mexico

Papilio homerus
Homerus Swallowtail
EN <sup>75</sup> B1+2cd
Iamaica

Papilio hospiton
Corsican Swallowtail
EN 75 B1+2c
France, Italy

Papilio jordani Jordan's Swallowtail VU <sup>75</sup> D2

Indonesia

Papilio leucotaenia
Cream-banded Swallowtail
VU ''5 B1+2c
Burundi, Rwanda, Uganda

Papilio mangoura VU 75 BI+2c Madagascar Papilio moerneri EN 75 B1+2c

Papua New Guinea

Papilio neumoegeni VU <sup>75</sup> B1+2c, D2 Indonesia

Papilio osmana VU <sup>75</sup> B1+2c, D2 Philippines Papilio phorbanta

Papilio phorbanta
Papillon La Pature
VU 75 B1+2ac
Réunion

Parides ascanius
Fluminense Swallowtail
VU 75 B1+2ac
Brazil

Parnassius apollo Apollo

VU 75 A1cde
Albania, Andorra, Armenia, Austria, Azerbaijan?, Bulgaria, China, Czech Republic, Finland, France, Georgia, Germany, Greece, Hungary?, Iran, Iraq, Italy, Kazakhstan, Kyrgyzstan, Liechtenstein, Mongolia, Netherlands?, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Syria, Turkey, Ukraine, Yugoslavia

Parnassius autocrator
VU 75 D2
Afghanistan, Tajikistan
Troides dohertyi
Talaud Black Birdwing
VU 75 B1+2c

Indonesia

Troides prattorum
VU 75 D2
Indonesia

Family SPHINGIDAE

Euproserpinus wiesti Prairie Sphinx Moth CR <sup>185</sup> B1+2c USA

Order ODONATA

Family AESHNIDAE

Acanthaeshna victoria
VU 123 B1+2c

VU 123 B1+2c Australia

Aeshna meruensis EN <sup>123</sup> B1+2c Tanzania

Aeshna persephone VU 123 B1+2c USA Aeshna williamsoniana EN 123 Alc

Mexico

Cephalaeschna acutifrons VU 123 B1+2c

Oligoaeschna kunigamiensis EN 123 B1+2c

Japan (Nansei-shoto)

Family AMPHIPTERYGIDAE

Amphipteryx agrioides

EN 123 A1c

Belize, El Salvador, Guatemala,

Honduras, Mexico

Family CALOPTERYGIDAE

Calopteryx syriaca

EN 123 A2c

Jordan, Syria, Turkey

Hetaerina rudis

EN 123 B1+2c

Guatemala, Mexico

Family CHLOROCYPHIDAE

Rhinocypha hageni

EN 123 B1+2c

Philippines

Rhinocypha latimaculata

EN 123 B1+2c

Philippines

Rhinocypha ogasawarensis

CR 123 B1+2c

Japan (Ogasawara-gunto)

Rhinocypha uenoi

EN 123 B1+2c

Japan (Nansei-shoto)

Family COENAGRIONIDAE

Argiagrion leoninum

EN 123 B1+2c

Sierra Leone

Argiocnemis solitaria

CR 123 B1+2c

Mauritius (Rodrigues)

Argiocnemis umbargae

EN 123 B1+2c

Cameroon

Boninagrion ezoin

CR 123 B1+2c

Japan (Ogasawara-gunto)

Coenagrion mercuriale

Southern Damselfly

VU 123 A2c

Albania?, Algeria, Austria, Belgium, Bulgaria?, Czech Republic?, France,

Germany, Hungary?, Italy, Liechtenstein, Luxembourg,

Moldova?, Morocco, Netherlands,

Portugal, Romania?, Slovakia?,

Spain, Switzerland, Tunisia, Ukraine?, United Kingdom, Yugoslavia?

Enallagma camerunense

EN 123 B1+2c

Enallagma recurvatum

Barrens Bluet Damselfly

VU 123 A2c

USA

Ischnura gemina

San Francisco Forktail Damselfly

EN 123 A2e

USA

Megalagrion adytum

Adytum Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Megalagrion leptodemas

Leptodemas Damselfly

EN 123 B1+2c

USA (Hawaiian Is)

Megalagrion nigrolineatum

Black-lined Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Megalagrion oahuense

Oahu Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Megalagrion oceanicum

Oceanic Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Megalagrion pacificum

Pacific Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Megalagrion xanthomelas

Orange-black Damselfly

VU 123 B1+2c

USA (Hawaiian Is)

Mortonagrion hirosei

EN 123 B1+2c

Japan

Nehalennia pallidula

VU 123 B1+2c

Family CORDULEGASTERIDAE

Chlorogomphus iriomotensis

EN 123 B1+2c

Japan (Nansei-shoto)

Cordulegaster mzymtae

VU 123 B1+2c

Armenia, Azerbaijan, Georgia,

Russia?, Turkey

Zoraena sayi

Florida Spiketail Dragonfly

VU 123 B1+2c

Family CORDULIDAE

Austrocordulia leonardi

CR 123 B1+2c

Australia

Hemicordulia ogasawarensis

EN 123 B1+2c

Japan (Ogasawara-gunto)

Hemicordulia okinawensis

VU 123 B1+2c

Japan (Nansei-shoto)

Libellulosoma minuta

VU 123 B1+2c

Madagascar

Macromia ishidai

EN 123 B1+2c

Japan

Macromia kubokaiya

EN 123 B1+2c

Japan (Nansei-shoto)

Macromia splendens

Shining Macromia Dragonfly

VU 123 B1+2c

France, Portugal, Spain

Macromia urania

EN 123 B1+2c Japan

Oxygastra curtisii

Orange-spotted Emerald

VU 123 Alc

Belgium, France, Germany, Italy,

Morocco, Netherlands, Portugal,

Spain, Switzerland, United Kingdom Somatochlora brevicincta

VU 123 D2

Canada

Somatochlora hineana Ohio Emerald Dragonfly

EN 123 B1+2c

USA

Somatochlora margarita

Big Thicket Emerald Dragonfly

VU 123 D2 USA

Williamsonia lintneri Banded Bog Skimmer Dragonfly

VU 123 A2c

USA

Family EPIOPHLEBIIDAE

Epiophlebia laidlawi

Relict Himalayan Dragonfly VU 123 B1+2c

India, Nepal



Family GOMPHIDAE

Asiagomphus yayeyamensis EN 123 B1+2c

Japan

Burmagomphus sivalikensis CR 123 A1c

India

Cornigomphus guineensis

EN 123 A1c Equatorial Guinea

Diaphlebia pallidistylus

EN 123 A1c Costa Rica

Costa Rica

Epigomphus camelus

EN 123 Alc

Epigomphus clavatus

EN 123 A1c Guatemala

Epigomphus crepidus

EN 123 A1c Mexico

Epigomphus paulsoni EN 123 A1c

Epigomphus subsimilis

EN 123 A1c Costa Rica

Epigomphus verticornis

EN 123 A1c Costa Rica

Gomphurus consanguis

Cherokee Clubtail Dragonfly VU 123 B1+2c

USA

Gomphurus lynnae

EN 123 B1+2c USA

Gomphus graslini

VU 123 B1+2c France, Spain

Gomphus sandrius

Tennessee Clubtail Dragonfly EN 123 A1c

USA

Gomphus septima

Septima's Clubtail Dragonfly VU 123 B1+2c

USA

Isomma hieroglyphicum

VU 123 Alc Madagascar

Leptogomphus yayeyamensis

EN 123 B1+2c

Japan (Nansei-shoto)

Onychogomphus assimilis

VU 123 B1+2c

Armenia, Azerbaijan, Georgia, Turkey

Onychagomphus macrodon

EN 123 B1+2c Israel, Jordan, Turkey

Ophiogomphus acuminatus

VU 123 A2c

Ophiogomphus edmundo

Edmund's Snaketail Dragonfly

EN 123 B1+2c

USA

Ophiogomphus howei

Howe's Midget Snaketail Dragonfly

VU 123 A2c USA

Paragomphus sinaiticus

VU 123 A2c

Egypt, Niger, Oman, Saudi Arabia,

Progomphus bellei

Belle's Sand Clubtail

VU 123 A2c USA

Progomphus risi

EN 123 Alc Mexico

Stylurus potulentus

Yellow-sided Clubtail

VU 123 A2c USA

Stylurus townesi

Bronze Clubtail Dragonfly

VU 123 A2c

Family HEMIPHLEBIIDAE

Hemiphlebia mirabilis

VU 123 B1+2c

Australia

Family LESTIDAE

Indolestes boninensis

CR 123 B1+2c

Japan (Ogasawara-gunto)

Family LIBELLULIDAE

Allorhizucha campioni

EN 123 Alc Sierra Leone

Boninthemis insularis

CR 123 B1+2c

Japan (Ogasawara-gunto)

Brachythemis fuscopalliata

VU 123 B1+2c

Iraq, Israel, Turkey

Brachythemis liberiensis

CR 123 A1c

Guinea-Rissau

Libellula angelina

CR 123 A1c Japan

Libellula jesseana

Purple Chaser

VU 123 A2c

USA

Lyriothemis tricolor

EN 123 B1+2c

Japan (Nansei-shoto)

Monardithemis flava

VU 123 B1+2c

Angola, Zambia

Palpopleura albifrons CR 123 A1c

Gabon

Trithemis hartwigi

EN 123 Alc

Equatorial Guinea

Trithemis nigra

CR 123 B1+2c

São Tomé & Príncipe (Príncipe)

Family MEGAPODAGRIONIDAE

Amanipodagrion gilliesi

EN 123 B1+2c

Tanzania

Heteragrion eboratum

EN 123 A1c

Guatemala, Honduras

Heteragrion tricellulare

EN 123 Alc

Guatemala, Mexico

Hypolestes clara

EN 123 A1c

Jamaica

Hypolestes trinitatis

EN 123 Alc

Cuba

Paraphlebia zoe

EN 123 Alc

Mexico

Rhipidolestes okinawanus

EN 123 B1+2c

Japan (Nansei-shoto)

Thaumatoneura inopinata

EN 123 A1c

Costa Rica, Panama

Family PETALURIDAE

Petalura pulcherrima

EN 123 B1+2c

Australia

### Family PLATY CNEMIDIDAE

Platycnemis mauriciana CR 123 B1+2c

Mauritius

# Family PLATYSTICTIDAE

Palaemnema chiriquita

EN 123 A1c Costa Rica

Palaemnema gigantula

EN 123 A1c Costa Rica

Palaemnema melanota

EN 123 A1c Costa Rica

Palaemnema paulicoba

EN 123 A1c Mexico

Palaemnema reventazoni

EN 123 A1c Costa Rica

### Family PSEUDOSTIGMATIDAE

Mecistogaster asticta

VU 123 A1c Brazil

Mecistogaster pronoti

CR 123 A1c Brazil

### Family SYNLESTIDAE

Chlorolestes apricans

EN 123 B1+2ab South Africa

Ecchlorolestes peringueyi

EN 123 B1+2c South Africa

Phylolestes ethelae

VU 123 A1c, B1+2c Dominican Republic

### Order ORTHOPTERA

# Family ACRIDIDAE

Acrolophitus pulchellus Idaho Point-headed Grasshopper

VU 125 B1+2bd

USA

Appalachia arcena

Michigan Bog Grasshopper VU 125 B1+2bd USA

Chloaeltis aspasma

Siskiyou Chloealtis Grasshopper

VU 125 B1+2bd USA

Chartippus acroleucus

VU 125 B1+2bd Hungary, Romania Miramella irena

VU 125 B1+2d Hungary, Romania

Odontopodisma montana

VU 125 B1+2d Hungary, Romania

Odontopodisma rubripes

VU 125 B1+2d Hungary

Schayera baiulus

CR 125 B1+2bd

Spharagemon superbum

VU 125 B1+2bd

USA

Stenobothrodes eurasius

VU 125 B1+2d Hungary, Romania

Trimerotropis infantilis

Zyantc Band-winged Grasshopper

EN 146 A1c USA

Trimerotropis occidentaloides

Santa Monica Mountains

Grasshopper

EN 146 A1c

USA

Trimerotropis occulens

Lompoc Grasshopper

EN 146 A1c

USA

Zubovskia banatica

VU 125 B1+2d

Hungary, Romania

# Family EUMASTACIDAE

Eumorsea pinaleno

Pinaleno Monkey Grasshopper

VU 125 B1+2bd

USA

Psychomastatix deserticola

Desert Monkey Grasshopper VU 125 B1+2bd

USA

### Family GRYLLIDAE

Caconemobius howarthi

Howarth's Cave Cricket VU 125 D2

USA (Hawaiian Is)

Cacanemobius schauinslandi

Schauinsland's Bush Cricket

VU 125 D2

USA (Hawaiian Is)

Caconemobius varius

Kaumana Cave Cricket VU 125 B1+2bd, C2a

USA (Hawaiian Is)

Cycloptilum irregularis

Keys Scaly Cricket VU 125 C2a, D2

USA

Oecanthus laricis

Laricis Tree Cricket

EN 125 B1+2b

USA

Thaumatogryllus cavicola

Volcanoes Cave Cricket

VU 125 D2

USA (Hawaiian Is)

Thaumatogryllus variegatus

Kauai Thin-footed Bush Cricket

VU 125 B1+2bd

USA (Hawaiian Is)

### Family RHAPHIDOPHORIDAE

Daihinibaenetes arizonensis

Arizona Giant Sand Treader Cricket VU 125 B1+2bd

USA

Macrobaenetes kelsoensis

Kelso Giant Sand Treader Cricket VU 125 B1+2bd

USA

Macrobaenetes valgum

Coachelia Giant Sand Treader

Cricket

VU 125 B1+2bd

**USA** 

Tasmanoplectron isolatum

VU 125 D1+2

Australia

Utabaenetes tanneri

Tanner's Black Camel Cricket

VU 125 B1+2bd

USA

#### Family STENOPELMATIDAE

Ammopelmatus kelsoensis

Kelso Jerusalem Cricket

VU 125 B1+2bd

USA

Ammopelmatus muwu

Port Conception Jerusalem Cricket

VU 125 B1+2bd

USA

Deinacrida fallai

Poor Knights Weta

VU 185 D2

New Zealand

Deinacrida heteracantha

Wetapunga

 $VU^{185}D2$ 

New Zealand

Deinacrida rugosa
Stephens Island Weta
VU 185 D2
New Zealand

Stenopelmatus cahuilaensis Coachella Valley Jerusalem Cricket VU <sup>125</sup> B1+2bd USA

Stenopelmatus navajo Navajo Jerusalem Cricket VU <sup>125</sup> B1+2bd USA

# Family TETRIGIDAE

Bienkotetrix transsylvanicus VU <sup>125</sup> B1+2d Hungary, Romania

Tetrix sierrana
Sierra Pygmy Grasshopper
VU 125 D2
USA

Tettigidea empedonepia
Torreya Pygmy Grasshopper
CR <sup>125</sup> B1+2bd
USA

### Family TETTIGONIIDAE

Austrosaga spinifer VU 123 B1+2bd Australia

Baetica ustulata VU 125 B1+2bd Spain

Banza nihoae
Nihoa Banza Conehead Katydid
VU 125 B1+2bd
USA (Hawaiian 1s)

Belocephalus micanopy
Big Pine Key Conehead Katydid
VU 125 B1+2bd
USA

Belocephalus sleighti
Keys Short-winged Conehead
Katydid

VU 125 B1+2bd USA

Conocephaloides remotus
Remote Conehead Katydid
VU 125 B1+2bd

USA (Hawaiian 1s)

Hemisaga elongata

CR 125 B1+2bd

Australia

Hemisaga lucifer
VU 125 B1+2bd

Australia

Hemisaga vepreculae VU <sup>125</sup> B1+2bd Australia Idiostatus middlekaufi Middlekauf's Shieldback Katydid CR <sup>125</sup> B1+2bd USA

Isophya harzi VU <sup>125</sup> B1+2bd Hungary, Romania

Ixalodectes flectocercus CR 125 B1+2bd Australia

Kawanphila pachomai EN <sup>125</sup> B1+2bd

Metrioptera domogledi VU <sup>125</sup> B1+2bd Hungary, Romania Nanodectes bulbicercus CR <sup>125</sup> B1+2bd Australia

Neduba longipennis Santa Monica Shieldback Katydid CR <sup>125</sup> B1+2bd USA

Onconotus servillei
VU 125 B2d+3b
Hungary, Romania
Pachysaga munggai
VU 125 B1+2bd
Australia

Pachysaga strobila CR <sup>125</sup> B1+2bd Australia

Phasmodes jeeba VU 125 B1+2c Australia

Psacadonotus insulanus EN <sup>125</sup> B1+2bd Australia

Psacadonotus seriatus VU 125 B1+2bd

Australia
Saga pedo

Predatory Bush Cricket

VU 125 B1+2bd

Armenia?, Austria, Azerbaijan?,
Bulgaria, China?, Czech Republic,
France, Georgia, Germany?,
Hungary, Italy, Kazakhstan,
Kyrgyzstan, Romania, Russia,
Slovakia, Spain, Switzerland,
Tajikistan, Turkmenistan, Ukraine,

Throscodectes xederoides EN 125 B1+2bd Australia

Uzbekistan, Yugoslavia

Throscodectes xiphos EN <sup>125</sup> B1+2bd Australia Windbalea viride
VU 125 B1+2bd
Australia
Zaprochilus ninae
VU 125 B1+2bd
Australia

# Order PLECOPTERA

# Family GRIPOPTERYGIDAE

Leptoperla cacuminis

Mount Kosciusko Wingless Stonefly

VU 185 D2

Australia

Riekoperla darlingtoni
Mount Donna Buang Wingless
Stonefly
VU 185 D2
Australia

# Class ONYCHOPHORA

# Order ONYCHOPHORA

Family PERIPATIDAE

Macroperipatus insularis EN <sup>122</sup> B1+2c Jamaica

Speleoperipatus spelaeus CR <sup>122</sup> B1+2c Jamaica

# Family PERIPATOPSIDAE

Peripatoides indigo VU <sup>122</sup> B1+2cd New Zealand Peripatoides suteri VU <sup>122</sup> B1+2c New Zealand Peripatopsis alba

Peripatopsis alba EN <sup>122</sup> B1+2c South Africa

Tasmanipatus anophthalmus EN <sup>122</sup> B1+2bc Australia

### Class OLIGOCHAETA

### Order HAPLOTAXIDA

Family KOMAREKIONIDAE

Komarekiona eatoni VU <sup>185</sup> B1+2c USA

### Family MEGASCOLECIDAE

Driloleirus americanus Washington Giant Earthworm VU <sup>185</sup> D2 USA Driloleirus macelfreshi Oregon Giant Earthworm VU 185 D2

USA

Megascolides australis Giant Gippsland Earthworm VU 185 D2

Australia

Family TUBIFICIDAE

Phallodrilus macmasterae CR 94 B1+2c Bermuda

### Class POLYCHAETA

Order (unknown)

Family NERILLIDAE

Mesonerilla prospera CR 94 B1+2c Bermuda

# Class BIVALVIA

# Order UNIONOIDA

# Family HYRIIDAE

Castalia martensi VU 108 Alae Brazil

Diplodon dunkerianus EN 108 Alae Brazil

Diplodon expansus VU 108 Alae

Diplodon fontaineanus EN 108 A1ae Brazil

Diplodon pfeifferi VU 108 A1ae Brazil

Westralunio carteri VU 115 A1c, B1+2bc

### Family MARGARITIFERIDAE

Margaritifera auricularia

CR 154 A1c Belgium, Czech Republic, France, Germany, Italy, Luxembourg, Netherlands, Portugal, Spain, United Kingdom

Margaritifera hembeli Louisiana Pearlshell CR 24 A1c USA

Margaritifera margaritifera

EN 115 A1ce+2c Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Luxembourg, Norway, Poland, Portugal, Russia, Spain, Sweden, United Kingdom

Margaritifera marrianae Alabama Pearl Shell EN 24 A1c+2ce USA

# Family UNIONIDAE

Alasmidonta mccordi CR 24 Alc USA

Alasmidonta raveneliana Appalacian Elktoe CR 24 A1c **USA** 

Alasmidonta robusta Cardina Elktoe CR 24 A2e USA

Alasmidonta wrightiana Ochlockonee Arcmussel CR 24 A1ce USA

Amblema neislerii Fat Threeridge CR 24 Alce USA

Arkansia wheeleri Ouachita Rock Pocketbook CR 24 Alce USA

Cyprogenia aberti Western Fan-shell EN 24 Alce

Cyprogenia stegaria Fanshell

CR 24 Alce USA

USA

Disconaias salinasensis EN 24 Alce USA

Dromus dromas Dromedary Pearly Mussel CR 24 Alce USA Elliptio arca

EN 24 Alce

Elliptio chipolaensis CR 24 Alce USA

Elliptio fraternum EN 24 A1ce

**USA** 

Elliptio nigella Winged Spike CR 24 Alc USA

Elliptio spinosa Altamaha Spinymussel EN 24 Alce USA

Elliptio steinstansana Tar River Spinymussel CR 24 A1c USA

Elliptio waltoni EN 24 Alc USA

Elliptoideus sloatianus CR 24 A1ce USA

Epioblasma arcaeformis CR 24 Alc USA

Epioblasma biemarginata CR 24 Alc USA

Epioblasma brevidens CR 24 A1ce USA

Epioblasma capsaeformis CR 24 Alce USA

Epioblasma flexuosa CR 24 A1c USA

Epioblasma haysiana CR 24 Alc USA

Epioblasma lenior CR 24 A1c USA

Epioblasma lewisii CR 24 Alc USA

Epioblasma metastriata CR 24 Alce

Epioblasma othcaloogensis CR 24 A1ce+2ce

USA Epioblasma penita CR 24 Alc USA

Epioblasma personata CR 24 Alc USA



Epioblasma propinqua CR <sup>24</sup> A1c USA

Epioblasma sampsonii CR <sup>24</sup> A1c USA

Epioblasma stewardsonii CR <sup>24</sup> Alc USA

Epioblasma turgidula CR <sup>24</sup> A1c USA

Fusconaia cor Shiny Pigtoe CR <sup>24</sup> A1c+2c USA

Fusconaia cuneolus Fine-rayed Pigtoe CR <sup>24</sup> A1ce+2c USA

Fusconaia escambia Narrow Pigtoe EN <sup>24</sup> A1c USA

Fusconaia masoni Atlantic Pigtoe EN <sup>24</sup> A1c USA

Hemistena lata
Cracking Pearlymussel
CR <sup>24</sup> A1c
USA

Lampsilis abrupta Pink Mucket EN <sup>24</sup> Alce USA

Lampsilis altilis
Fine-lined Pocketbook
EN 24 A1ce
USA

Lampsilis binominata Lined Pocketbook CR <sup>24</sup> A1c USA

Lampsilis cariosa Yellow Lampmussel EN <sup>24</sup> A1c USA

Lampsilis dolabraeformis VU <sup>24</sup> B1+2bcd USA

Lampsilis higginsii Higgin's Eye EN <sup>24</sup> A1ce+2ce USA Lampsilis powellii Arkansas Fatmucket EN <sup>24</sup> A1c

USA

Lampsilis rafinesqueana Neosho Mucket EN <sup>24</sup> Alce

USA

Lampsilis streckeri Speckled Pocketbook CR <sup>24</sup> Alc USA

Lampsilis virescens
Alabama Lampmussel
CR <sup>24</sup> A1ce+2ce
USA

Lasmigona decorata Carolina Heelsplitter CR <sup>24</sup> A1c USA

Lemiox rimosus
Birdwing Pearlymussel
CR <sup>24</sup> A1ce
USA

Lexingtonia subplana CR <sup>24</sup> A1c USA

Medionidus acutissimus Alabama Moccasinshell EN <sup>24</sup> Alce+2ce USA

Medionidus mcglameriae CR <sup>24</sup> Alce USA

Medionidus parvulus Coosa Moccasinshell CR <sup>24</sup> A1ce+2ce USA

Medionidus penicillatus CR <sup>24</sup> A1ce+2ce USA

Medionidus simpsonianus CR <sup>24</sup> Alce USA

Medionidus walkeri EN <sup>24</sup> Alce USA

Obovaria retusa Ring Pink CR <sup>24</sup> A1ce+2ce USA

Pegias fabula
Littlewing Pearlymussel
CR <sup>24</sup> A1ce+2ce
USA

Plethobasus cicatricosus
White Wartyback
CR <sup>24</sup> A1ce+2ce
USA

Plethobasus cooperianus
Orangefoot Pimpleback
CR <sup>24</sup> A1ce+2ce
USA

Pleurobema altum CR <sup>24</sup> A1c USA

Pleurobema avellanum CR <sup>24</sup> A1c USA

Pleurobema bournianum CR <sup>24</sup> Alce+2ce USA

Pleurobema chattanoogaense CR <sup>24</sup> Alce+2ce USA

Pleurobema clava Clubshell CR <sup>24</sup> Alce USA

Pleurobema collina
James River Spinymussel
CR <sup>24</sup> Alce
USA

Pleurobema curtum Black Clubshell CR <sup>24</sup> Alc USA

Pleurobema flavidulum CR <sup>24</sup> Alc USA

Pleurobema furvum
Dark Pigtoe
CR <sup>24</sup> A1ce+2ce
USA

Pleurobema georgianum Southern Pigtoe CR <sup>24</sup> A1ce+2ce

USA

Pleurobema gibberum

Cumberland Pigtoe

CR <sup>24</sup> A1ce+2ce, B1+2c USA

Pleurobema hagleri CR <sup>24</sup> A1c USA

Pleurobema hanleyianum CR <sup>24</sup> A1c USA

Pleurobema johannis CR <sup>24</sup> A1c USA Pleurobema marshalli

Flat Pigtoe

CR 24 A1ce+2ce USA

Pleurobema murrayense

CR 24 Alc

USA

Pleurobema nucleopsis

CR 24 Alc

USA

Pleurobema oviforme

Tennessee Clubshell

VU 24 B1+2c

USA

Pleurobema perovatum

Ovate Clubshell

CR 24 A1c

USA

Pleurobema plenum

Rough Pigtoe

CR 24 Alce

USA

Pleurobema rubellum

Warrior Pigtoe

CR 24 Alc USA

Pleurobema strodeanum

VU 25 A1c+2c USA

Pleurobema taitianum

Heavy Pigtoe

CR 24 Alc

USA

Pleurobema troschelianum

CR 24 Alc

USA

Pleurobema verum

True Pigtoe

CR 24 Alc

USA

Popenaias popeii

CR 24 Alc

USA

Potamilus amphichaenus

Texas Heelsplitter

EN 24 B1+2c

USA

Potamilus capax

Fat Pocketbook

CR 24 A1c

USA

Potamilus inflatus

Alabama Heelsplitter EN 24 A1c, B1+2c

USA

Ptychobranchus greenii Triangular Kidneyshell

CR 24 Alc

USA

Ptychobranchus jonesi

Southern Kidneyshell

CR 24 Alc

**USA** 

Ouadrula couchiana

CR 24 Alc

USA

Quadrula fragosa

Winged Mapleleaf

CR 25 Alc

USA

Quadrula sparsa

Appalachian Monkeyface

CR 24 Alc

USA

Quadrula stapes

Stirrupshell

CR 24 Alc

USA

Ouadrula tuberosa

CR 24 Alc

Ouincuncina mitchelli

False Spike

CR 24 Alc

USA

Toxolasma cylindrellus

CR 24 Alc

USA

Order VENEROIDA

Family TRIDACNIDAE

Tridacna derasa

Southern Giant Clam

VU 181 A2cd

Australia, Fiji, French Polynesia?, Guam, Indonesia, New Caledonia, Northern Marianas, Palau, Papua

New Guinea, Philippines, Solomon Islands, Tonga, Vanuatu

Tridacna gigas

Giant Clam

VU 181 A2cd

Australia, Federated States of Micronesia, Fiji (ex?), Guam (ex?), Indonesia, Japan (Nansei-shoto

(ex?)), Kiribati, Malaysia, Marshall Islands, Myanmar, New Caledonia

(ex?), Northern Marianas (ex?), Palau, Papua New Guinea,

Philippines, Solomon Islands, Taiwan (ex?), Thailand, Tuvalu,

USA [int] (Hawaiian Is [int]),

Vanuatu (ex?)

Tridacna rosewateri

VU 181 A2cd

Mauritius

Tridacna tevoroa

Tevoro Clam

VU 181 B1+2c

Fiji, Tonga

Class GASTROPODA

Order

ARCHAEOGASTROPODA

Family HELICINIDAE

Helicina rostrata

EN 133 B1+2c

Guatemala, Nicaragua

Ogasawarana chichijimana

CR 115 A2ce

Japan (Ogasawara-gunto)

Ogasawarana habei

CR 115 A2ce

Japan (Ogasawara-gunto)

Ogasawarana metamorpha

CR 115 A2ce

Japan (Ogasawara-gunto)

Ogasawarana rex

CR 115 A2ce

Japan (Ogasawara-gunto) Ogasawarana yoshiwarana

CR 115 A2ce

Japan (Ogasawara-gunto)

Family HYDROCENIDAE

Georissa laseroni

VU 115 B1+2c, D2

Australia

Monterissa gowerensis

VU 141 D2

Australia

Family NERITIDAE

Neritina tiassalensis

CR 33 B1+2e Côte d'Ivoire

Family TURBINIIDAE

Astraea heliotropium

CR 166 A2e

New Zealand

Order BASOMMATOPHORA

Family ACROLOXIDAE

Acroloxus coloradensis

Rocky Mountain Capshell VU 24 B1+2c

USA



# Family ANCYLIDAE

Ancylus ashangiensis EN 33 B1+2c

Ethiopia

[L. Ashangi]

Ferrissia mcneili

Hood Ancylid

VU 24 Alce+2c

USA

Rhodacme elatior

Domed Ancylid

VU 24 A1ce+2e USA

Rhodacme filosa

Wicker Ancylid

VU 24 Alce USA

# Family CARYCHIIDAE

Zospeum biscaiense

VU 115 D2

Spain

### Family GLACIDORBIDAE

Glacidorbis occidentalis

VU 139 D2

Australia

### Family LYMNAEIDAE

Lantzia carinata

CR 34 B1+2c

Réunion

Stagnicola bonnevillensis

VU 24 Alce+2e

**USA** 

Stagnicola utahensis

Thickshell Pondsnail

CR 115 A1ce+2e

USA

### Family PHYSIDAE

Physella microstriata

Fish Lake Physa

VU 24 A1ce

USA

Physella spelunca

Cave Physa

VU 24 Alce

USA

Physella utahensis

Utah Physa

VU 24 A1ce+2e USA

Physella zionis

Wet Rock Physa

VU 24 Alce

USA

# Family PLANORBIDAE

Afrogyrus rodriguezensis

EN 33 B1+2abcd

Mauritius (Rodrigues)

Afrogyrus starmuehlneri

EN 33 B1+2abcd

Madagascar

Amphigyra alabamensis

Shoal Sprite

CR 24 A1ce+2e

LISA

Ancylastrum cumingianus

Australian Freshwater Limpet

CR 115 Ale

Australia

Biomphalaria barthi

CR 33 B1+2c

Ethiopia

Biomphalaria tchadiensis

VU 33 B2c+B3b

Chad

[L. Chad]

Bulinus camerunensis

VU 33 B1+2abcd

Cameroon

Bulinus nyassanus

VU 33 B1+2c

Malawi

[L. Malawi]

Bulinus succinoides

EN 33 B1+2c

Malawi

[L. Malawi]

Bulinus transversalis

VU 33 B1+2c

Kenya, Uganda

[L. Victorial

Ceratophallus socotrensis

CR 33 B1+2c

Yemen (Socotra)

Glyptophysa petiti

EN 26 Alce

New Caledonia

Gyraulus cockburni

CR 33 B1+2c

Yemen (Socotra)

Gyraulus mauritianus

VU 33 D2

Mauritius

Neoplanorbis carinatus

CR 24 A1ce+2e

USA

Neoplanorbis smithi

CR 24 A1ce+2e

**USA** 

Neoplanorbis tantillus

CR 24 A1ce+2e

USA

Neoplanorbis umbilicatus

CR 24 A1ce+2e

USA

Planorbella magnifica

Magnificent Ramshorn

VU 24 A1ce

USA

Planorbella multivolvis

Acorn Ramshorn

VU 24 Alce

USA

Family SIPHONARIIDAE

Siphonaria compressa

CR 100 B1+2c

South Africa

### Order MESOGASTROPODA

Family ACICULIDAE

Acicula norrisi

VU 115 D2

Gibraltar

Acicula palaestinensis

VU 87 D2

Platyla foliniana

VU 29 D2

France

Platyla lusitanica

VU 115 D2

Portugal

Renea bourguignatiana

VU 29 D2

France, Italy

Renea gormonti

VU 29 D2

France

Renea moutoni

VU 29 D2 France

Renea paillona

VU 29 D2

France

Renea singularis

VU 29 D2

France

Family AMPULLARIDAE

Lanistes alexandri

EN 33 B1+2abcd

Tanzania [R. Wami]

Lanistes bicarinatus VII 33 D2

Zaire

VU 115 D2

Australia

Angrobia grampianensis Beddomeia capensis [R. Zaire] EN 138 A1c CR 115 B1+2c Lanistes farleri Australia Australia EN 33 B1+2abcd Tanzania Angrobia petterdi Beddomeia fallax VU 138 D2 EN 138 A1c Lanistes intortus Australia VU 33 D2 Australia Zaire Antrobia culveri Beddomeia forthensis [R. Zaire] Tumbling Creek Cavesnail VU 138 D2 EN 115 B1+2bc Lanistes nasutus EN 33 B1+2c USA Beddomeia franklandensis VU 138 D2 Malawi, Mozambique Antrorbis breweri VU 115 B1+2c [L. Malawi] Australia USA Lanistes neavei Beddomeia fromensis VU 33 B2c+B3bc Aphaostracon asthenes VU 138 D2 Zaire, Zambia Blue Spring Hydrobe Australia VU 24 D2 Lanistes neritoides Beddomeia fultoni CR 33 B1+2c **USA** VU 138 D2 Aphaostracon monas Congo Australia Wekiwa Hydrobe Lanistes nyssanus Beddomeia gibba VU 24 D2 EN 33 B1+2c VU 138 D2 USA Malawi, Mozambique Australia [L. Malawi] Aphaostracon pycnum Beddomeia hallae Dense Hydrobe Lanistes solidus VU 138 D2 VU 24 D2 EN 33 B1+2c Australia USA Malawi, Mozambique Beddomeia hullii Aphaostracon xynoelictum [L. Malawi] VU 138 D2 Fenney Spring Hydrobe Lanistes stuhlmanni Australia VU 24 D2 EN 33 B1+2abcd Beddomeia inflata USA Tanzania VU 138 D2 Arganiella exilis Pila speciosa Australia VU 26 D2 VU 33 B1+2bc Beddomeia kershawi France Ethiopia, Kenya, Somalia VU 138 D2 Assiminea infirma Family ASSIMINEIDAE Australia Badwater Snail Austroassiminea letha VU 115 B1+2c Beddomeia kessneri VU 138 D2 VU 138 D2 USA Australia Australia Assiminea pecos Beddomeia krybetes Omphalotropis hieroglyphica Pecos Assiminea VU 138 D2 EN 78 B1+2ab EN 115 B1+2c Australia Mauritins USA Beddomeia launcestonensis Beddomeia angulata Family CYCLOPHORIDAE VU 138 D2 VU 138 D2 Adelopoma stolli Australia Australia EN 133 B1+2c Beddomeia lodderae Beddomeia averni Guatemala, Nicaragua VU 138 D2 VU 138 D2 Ditropis whitei Australia Australia VU 141 B1+2c, D2 Beddomeia mesibovi Beddomeia bellii Australia VU 138 D2 VU 138 D2 Family HYDROBIIDAE Australia Australia Beddomeia minima Alzoniella hartwigschuetti Beddomeia bowryensis VU 138 D2 EN 138 A1c VU 79 B1+2c Australia Australia Austria Angrobia anodonta Beddomeia briansmithi Beddomeia petterdi VU 138 D2 VU 138 D2 VU 138 D2 Australia Australia Australia Angrobia dyeriana Beddomeia camensis Beddomeia phasianella

VU 138 D2

Australia

VU 138 D2

Australia



Beddomeia protuberata VU <sup>138</sup> D2 Australia

Beddomeia ronaldi VU <sup>138</sup> D2 Australia

Beddomeia salmonis VU <sup>138</sup> D2 Australia

Beddomeia tasmanica VU <sup>138</sup> D2 Australia

Beddomeia topsiae VU <sup>138</sup> D2 Australia

Beddomeia trochiformis VU <sup>138</sup> D2 Australia

Beddomeia turnerae VU <sup>138</sup> D2 Australia

Beddomeia waterhouseae VU <sup>138</sup> D2 Australia

Beddomeia wilmotensis VU <sup>138</sup> D2 Australia

Beddomeia wiseae
VU 138 D2
Australia

Beddomeia zeehanensis VU <sup>138</sup> D2 Australia

Belgrandiella alticola VU <sup>167</sup> D2 Slovakia

Belgrandiella austriana CR <sup>79</sup> B1+2c Austria

Belgrandiella bojnicensis VU <sup>167</sup> D2 Slovakia

Belgrandiella fuchsi VU <sup>79</sup> D2 Austria

Belgrandiella ganslmayri CR 79 B1+2c Austria

Belgrandiella mimula CR <sup>79</sup> B1+2c Austria

Belgrandiella parreyssi CR <sup>115</sup> B1+2b Austria

Belgrandiella pelerei CR <sup>79</sup> B1+2c Austria **Belgrandiella pyrenaica VU** <sup>26</sup> D2 France

Belgrandiella slovenica VU <sup>167</sup> D2 Slovakia

Belgrandiella styriaca CR <sup>115</sup> B1+2b Austria

Belgrandiella wawrai CR <sup>79</sup> B1+2c, C2a Austria

Bythinella badensis VU 115 B1+2c Germany

Bythinella bavarica VU 115 B1+2c Germany

Bythinella bicarinata CR <sup>26</sup> A1ce France

Bythinella compressa
VU 115 B1+2c
Germany

Bythinella cylindrica VU <sup>79</sup> B1+2c Austria

Bythinella dunkeri VU <sup>115</sup> B1+2c Belgium, Germany

Bythinella padiraci VU <sup>26</sup> D2 France

Bythinella viridis VU <sup>26</sup> D2 Belgium, France

Bythiospeum acicula VU 115 B1+2c Germany

Bythiospeum articense VU <sup>26</sup> D2 France

Bythiospeum cisterciensorum CR <sup>79</sup> B1+2c Austria

Bythiospeum garnieri
VU <sup>26</sup> D2
France

Bythiospeum geyeri EN 115 B1+2c Austria

Bythiospeum noricum
EN 113 B1+2c
Austria

Bythiospeum pfeifferi EN 115 B1+2c Austria Bythiospeum quenstedti VU 115 B1+2c Germany

Bythiospeum reisalpense EN <sup>79</sup> B1+2c Austria

Bythiospeum sandbergeri VU 115 B1+2c Germany

Bythiospeum tschapecki EN <sup>79</sup> B1+2c Austria

Cincinnatia helicogyra Crystal Siltsnail VU <sup>115</sup> B1+2c USA

Cincinnatia mica
Ichetucknee Siltsnail
VU 115 B1+2c
USA

Cincinnatia monroensis Enterprise Siltsnail VU 115 B1+2c USA

Cincinnatia parva Pygmy Siltsnail VU <sup>115</sup> B1+2c USA

Cincinnatia ponderosa Ponderous Siltsnail VU <sup>115</sup> B1+2c USA

Cincinnatia vanhyningi Seminole Siltsnail VU <sup>115</sup> B1+2c USA

Cincinnatia wekiwae Wekiwa Siltsnail VU 115 B1+2c USA

Clappia cahabensis Cahaba Pebblesnail CR <sup>115</sup> Alce+2e USA

Coahuilix hubbsi Coahuilix de Hubbs Snail CR <sup>154</sup> A2ce Mexico

Cochliopa texana
Phantom Cavesnail
VU 115 B1+2c
USA

Cochliopina milleri Miller's Snail VU 154 D2 Mexico Durangonella coahuilae

Durangonella de Coahuila Snail VU 115 D2

Mexico

Fissuria bovi VU 26 D2

France

Fonscochlea accepta

VU 138 D2

Fonscochlea aquatica

VU 138 D2

Fonscochlea billakalina

EN 138 Alce Australia

Fonscochlea conica

VU 115 D2 Australia

Fontigens turritella

Greenbrier Cavesnail VU 24 D2

USA

Graziana klazenfurtensis

EN 79 B1+2c

Austria

Hauffenia kerschneri

EN 79 B1+2c

Hauffenia wienerwaldensis

EN 79 B1+2c Austria

Hemistoma beaumonti

EN 138 Alce Australia

Hemistoma flexicolumella

VU 138 D2 Australia

Hemistoma minutissima

VU 138 D2 Australia

Hemistoma pusillior

EN 138 Alce Australia

Hemistoma whiteleggei

CR 138 Alce Australia

Heterocyclus perroquini

EN 26 A2e New Caledonia

Heterocyclus petiti

EN 26 A2e New Caledonia

Hydrobia scamandri

VU 26 D2

France

Iglica kleinzellensis

EN 79 B1+2c

Austria

Jardinella acuminata

EN 138 Alce Australia

Jardinella carnarvonensis

VU 138 D2 Australia

Jardinella colmani CR 138 Alce

Australia

Jardinella coreena

VU 138 D2

Australia

Jardinella corrugata

VU 138 D2 Australia

Jardinella edgbastonensis

VU 138 D2 Australia

Jardinella eulo

VU 138 D2 Australia

Jardinella exigua

VU 138 D2 Australia

Jardinella isolata

VU 138 D2 Australia

Jardinella jesswiseae

EN 138 Alce Australia

Jardinella pallida

EN 138 Alce Australia

Jardinella zeidlerorum

VU 138 D2

Australia

Lepvrium showalteri

Flat Pebblesnail VU 24 D2

USA

Litthabitella elliptica

VU 26 D2 France

Lobaunia danubialis

EN 79 B1+2c Austria

Moitessieria corsica

VU 26 D2 France (Corsica)

Moitessieria juvenisaneuis

VU 26 D2 France

Moitessieria locardi

VU 26 D2

France

Nanocochlea monticola

VU 138 D2 Australia

Nanocochlea pupoidea VU 138 D2

Palacanthilhiopsis vervierii

VU 26 D2 France

Paladilhia pleurotoma

VU 26 D2

France

Paladilhiopis bourguignati

VU 26 D2 France

Paludiscala caramba

Paludiscala de Oro Snail VU 115 D2

Mexico

Phrantela annamurrayae

VU 115 D2 Australia

Phrantela conica

VU 115 D2 Australia

Phrantela kutikina

VU 115 D2 Australia

Phrantela pupiformis VU 115 D2

Australia

Phrantela umbilicata

VU 115 D2 Australia

Phreatodrobia imitata Mimic Cavesnail

VU 24 D2 USA

Plagigeyeria conilis

VU 26 D2

Pseudamnicola anteisensis

VU 26 D2 France

Pseudamnicola klemmi

VU 26 D2 France

Sadleriana pannonica

VU 167 D2 Hungary, Slovakia

Stiobia nana

Sculpin Snail VÜ 24 D2

USA



Trochidrobia inflata
EN <sup>138</sup> A1ce
Australia

Trochidrobia minuta VU <sup>138</sup> D2

Australia

Trochidrobia smithi
VU <sup>138</sup> D2
Australia

Victodrobia burni VU <sup>138</sup> D2 Australia

Victodrobia elongata
VU <sup>138</sup> D2
Australia

Victodrobia millerae VU <sup>138</sup> D2 Australia

Family NEOCYCLOTIDAE

Amphicyclotulus liratus VU <sup>26</sup> D2 Martinique

Amphicyclotulus perplexus VU <sup>26</sup> D2 Guadeloupe

Family PLEUROCERIDAE

Elimia acuta VU <sup>24</sup> A1ce USA

Elimia alabamensis Mud Elimia VU <sup>24</sup> A1ce USA

Elimia albanyensis Black-crest Elimia VU <sup>24</sup> Alce USA

Elimia ampla Round Rocksnail CR <sup>24</sup> A1ce+2e USA

Elimia annettae Lily Shoals Elimia CR <sup>24</sup> A1ce+2e USA

Elimia aterina VU <sup>24</sup> Alce USA

Elimia bellula Walnut Elimia VU <sup>24</sup> A1ce USA

Elimia boykiniana Flaxen Elimia VU <sup>24</sup> Alce USA Elimia brevis Short-spired Elimia CR <sup>24</sup> Alce+2e USA

Elimia capillaris Spindle Elimia VU <sup>24</sup> Alce USA

Elimia clausa Closed Elimia CR <sup>24</sup> Alce+2e USA

Elimia crenatella Lacy Elimia VU <sup>24</sup> Alce USA

Elimia fascinans Banded Elimia VU <sup>24</sup> Alce USA

Elimia fusiformis Fusiform Elimia CR <sup>24</sup> A1ce+2e USA

Elimia haysiana Silt Elimia VU <sup>24</sup> A1ce USA

Elimia hydei Gladiator Elimia VU <sup>24</sup> Alce USA

Elimia impressa Constricted Elimia CR <sup>24</sup> A1ce+2e USA

Elimia interrupta Knotty Elimia VU <sup>24</sup> A1ce USA

Elimia interveniens Slowwater Elimia VU <sup>24</sup> Alce USA

Elimia jonesi Hearty Elimia CR <sup>24</sup> Alce+2e USA

Elimia laeta Ribbed Elimia CR <sup>24</sup> A1ce+2e USA

Elimia nassula Round-rib Elimia VU <sup>24</sup> Alce USA Elimia olivula Caper Elimia VU <sup>24</sup> Alce USA

Elimia pilsbryi Rough-lined Elimia CR <sup>24</sup> A1ce+2e USA

Elimia porrecta VU <sup>24</sup> Alce USA

Elimia pupaeformis Pupa Elimia CR <sup>24</sup> A1ce+2e USA

Elimia pybasi VU <sup>24</sup> A1ce USA

Elimia pygmaea Pygmy Elimia CR <sup>24</sup> A1ce+2e USA

Elimia strigosa VU <sup>24</sup> A1ce USA

Elimia teres VU <sup>24</sup> A1ce USA

Elimia troostiana VU <sup>24</sup> Alce USA

Elimia vanuxemiana Cobble Elimia CR <sup>24</sup> Alce+2e USA

Elimia varians Puzzle Elimia CR <sup>24</sup> Alce+2e USA

Gyrotoma excisa Excised Slitshell CR <sup>24</sup> A1ce+2e USA

Gyrotoma lewisii Striate Slitshell CR <sup>24</sup> A1ce+2e USA

Gyrotoma pagoda Pagoda Slitshell CR <sup>24</sup> Alce+2e USA

Gyrotoma pumila Ribbed Slitshell CR <sup>24</sup> A1ce+2e USA

USA

Gyrotoma pyramidata Leptoxis plicata Pleurocera alveare Plicate Rocksnail Pyramid Slitshell VU 24 A1ce CR 24 A1ce+2e USA USA USA Gyrotoma walkeri Leptoxis praerosa Onyx Rocksnail Round Slitshell VU 24 A2ce, B1+2c CR 24 A1ce+2e USA USA USA Leptoxis showalterii Io fluvialis CR 24 A1ce+2e Spiny River Snail EN 25 B1+2c USA USA USA Leptoxis taeniata Painted Rocksnail Leptoxis ampla VU 24 Alce VU 24 Alce **USA** USA USA Leptoxis torrefacta Leptoxis clipeata CR 24 A1ce+2e Agate Rocksnail CR 24 A1ce+2e USA USA Leptoxis virgata USA Leptoxis compacta Smooth Rocksnail VU 24 A1ce+2c Oblong Rocksnail CR 24 A1ce+2e USA USA Leptoxis vittata USA Leptoxis crassa Striped Rocksnail Boulder Snail CR 24 A1ce+2e VU 24 D2 USA USA USA Lithasia armigera Leptoxis formanii Armored Rocksnail CR 24 A1ce+2e VU 24 A1ce USA USA USA Lithasia curta Leptoxis formosa Maiden Rocksnail Knobby Rocksnail VU 24 A1ce CR 24 A1ce+2e USA USA USA Lithasia duttoniana Leptoxis ligata Rotund Rocksnail Helmet Rocksnail VU 24 A1ce CR 24 A1ce+2e USA USA USA Leptoxis lirata Lithasia geniculata Lyrate Rocksnail Ornate Rocksnail CR 24 A1ce+2e VU 24 Alce USA **USA** Leptoxis melanoidus Lithasia jayana Black Mudalia Rugose Rocksnail CR 24 A1ce+2e VU 24 Alce USA USA Leptoxis minor Lithasia lima Warty Rocksnail Knob Mudalia VU 24 A1ce+2e VU 24 Alce USA USA Leptoxis occultata Lithasia salebrosa Bigmouth Rocksnail Muddy Rocksnail CR 24 A1ce+2e VU 24 A1ce Tomicha natalensis CR 33 B1+2abcd USA USA South Africa Leptoxis picta Lithasia verrucosa Spotted Rocksnail Varicose Rocksnail Tomicha rogersi VU 24 Alce EN 33 B1+2abcd VU 24 A1ce

Rugged Hornsnail VU 24 A1ce Pleurocera annulifera Ringed Hornsnail VU 24 A1ce+2e Pleurocera brumbyi Spiral Hornsnail VU 24 Alce+2e Pleurocera corpulenta Corpulent Hornsnail VU 24 Alce Pleurocera curta Shortspire Hornsnail VU 24 Alce Pleurocera foremani Rough Hornsnail VU 24 Alce Pleurocera postelli VU 24 Alce Pleurocera pyrenella Skirted Hornsnail VU 24 Alce Pleurocera showalteri Upland Hornsnail VU 24 A1ce+2e Pleurocera walkeri Telescope Hornsnail VU 24 A1ce+2e Family **POMATIASIDAE** Tropidophora articulata EN 115 B1+2c Mauritius (Rodrigues) Tropidophora deburghiae EN 115 B1+2c Madagascar Family **POMATIOPSIDAE** Fenouilia kreitneri CR 56 A2ce China [L. Dali]

South Africa

**USA** 



Tricula montana EN <sup>56</sup> B1+2ce India

# Family PUPINIDAE

Hedleya macleayi VU 141 D2 Australia

Suavocallia splendens VU <sup>141</sup> D2 Australia

### Family THIARIDAE

Anceya giraudi EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Anceya terebriformis EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bathanalia howesi EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bathanalia straeleni EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bridouxiana giraudi EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bridouxiana leucoraphe EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bridouxiana ponsonbyi EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bridouxiana praeclara EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Bridouxiana rotundata
EN <sup>33</sup> B1+2c
Tanzania, Zaire
[L. Tanganyika]

Bridouxiana smithiana EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Chytra kirki
EN <sup>33</sup> B1+2c
Tanzania, Zaire
[L. Tanganyika]

Hirthia globosa EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika] Hirthia littorina

EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika] Lavigera grandis

EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Lavigera nassa EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Limnotrochus thomsoni EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Martelia tanganyicensis EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Mysorelloides multisulcata
EN <sup>33</sup> B1+2c
Tanzania, Zaire
[L. Tanganyika]

Paludomus ajanensis EN <sup>33</sup> B1+2abcd Seychelles

Paramelania damoni EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Paramelania irridescens EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Reymondia horei
EN <sup>33</sup> B1+2c
Tanzania, Zaire
[L. Tanganyika]

Reymondia pyramidalis EN 33 B1+2c

Tanzania, Zaire [L. Tanganyika]

Reymondia tanganyicensis EN 33 B1+2c

Tanzania, Zaire [L. Tanganyika] Spekia zonata

Spekia zonata
EN 33 B1+2c
Tanzania, Zaire
[L. Tanganyika]
Stanleya neritinoides

EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika] Stormsia minima

EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Syrnolopsis gracilis EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Syrnolopsis lacustris EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Syrnolopsis minuta
EN <sup>33</sup> B1+2c
Tanzania, Zaire
[L. Tanganyika]

Tanganyicia rufofilosa
EN 33 B1+2c
Tanzania, Zaire
[L. Tanganyika]
Tiphobia horei
EN 33 B1+2c

EN 33 B1+2c Tanzania, Zaire [L. Tanganyika]

Family VALVATIDAE

Valvata virens VU <sup>24</sup> Alce USA

Family VIVIPARIDAE

Bellamya constricta
EN 33 B1+2abcd
Kenya, Tanzania, Uganda
[L. Victoria]

Bellamya contracta EN 33 B1+2c Zaire

Bellamya costulata
EN <sup>33</sup> B1+2abcd
Kenya, Tanzania, Uganda
[L. Victoria]

Bellamya crawshayi EN <sup>33</sup> B1+2abcd Zaire, Zambia [L. Mweru]

Bellamya ecclesi EN <sup>33</sup> B1+2abcd Malawi, Mozambique [L. Malawi]

Bellamya jeffreysi EN <sup>33</sup> B1+2abcd Malawi, Mozambique [L. Malawi]

Bellamya jucunda
EN <sup>33</sup> B1+2abcd
Kenya, Tanzania, Uganda
[L. Victoria]

Bellamya leopoldvillensis EN <sup>33</sup> B1+2abcd Zaire

Bellamya liberiana CR <sup>33</sup> B1+2c Liberia

Bellamya monardi EN <sup>33</sup> B1+2abcd Angola, Namibia

Bellamya mweruensis EN <sup>33</sup> B1+2abcd Zaire, Zambia [L. Mweru]

Bellamya pagodiformis EN <sup>33</sup> B1+2abcd Zaire, Zambia [L. Mweru]

Bellamya phthinotropis EN <sup>33</sup> B1+2abcd Kenya, Tanzania, Uganda [L. Victoria]

Bellamya robertsoni EN <sup>33</sup> B1+2abcd Malawi, Mozambique [L. Malawi]

Bellamya rubicunda EN <sup>33</sup> B1+2abcd Uganda, Zaire [L. Albert]

Bellamya trochearis EN <sup>33</sup> BI+2abcd Kenya, Tanzania, Uganda [L. Victoria]

Campeloma decampi VU <sup>24</sup> A1ce+2e USA

Lioplax cyclostomaformis Cylindrical Lioplax VU <sup>24</sup> B1+2c USA

Neothauma tanganyicense EN <sup>33</sup> B1+2c Tanzania, Zaire [L. Tanganyika]

Notopala sublineata EN <sup>138</sup> A1ce Australia

### Order NEOGASTROPODA

Family CONIDAE

Conus africanus VU <sup>26</sup> D2 Angola

Conus cepasi VU <sup>26</sup> D2 Angola Conus nobrei VU <sup>26</sup> D2 Angola

Conus zebroides VU <sup>26</sup> D2 Angola

### Order STYLOMMATOPHORA

Family ACAVIDAE

Ampelita julii EN <sup>63</sup> B1+2abc Madagascar

Ampelita soulaiana VU <sup>63</sup> D2 Madagascar

Ampelita fulgurata EN <sup>63</sup> B1+2abc Madagascar

Clavator moreleti VU <sup>63</sup> B1+2c Madagascar

### Family ACHATINELLIDAE

Achatinella apexfulva
CR 81 A1e
USA (Hawaiian Is)
Achatinella bellula
CR 81 A1ce B1+2a

CR 81 A1ce, B1+2abcde USA (Hawaiian Is) Achatinella bulimoides

CR 81 A1ce, B1+2abcde USA (Hawaiian Is)

Achatinella byronii CR <sup>81</sup> AIce, BI+2abcde USA (Hawaiian Is)

Achatinella cestus

CR 81 A Ice, B1+2abcde
USA (Hawaiian Is)

Achatinella concavospira CR 81 Alce, B1+2abcde USA (Hawaiian Is)

Achatinella curta
CR 81 A1ce, B1+2abcde
USA (Hawaiian Is)

Achatinella decipiens
CR 81 A Ice, B I+2abcde
USA (Hawaiian Is)

Achatinella fulgens CR 81 Alce, B1+2abcde USA (Hawaiian Is)

Achatinella fuscobasis CR 81 A1ce, B1+2abcde USA (Hawaiian Is)

Achatinella leucorrhaphe CR <sup>81</sup> A1ce, B1+2abcde USA (Hawaiian Is) Achatinella lila

CR 81 Alce, B1+2abcde
USA (Hawaiian Is)

Achatinella lorata

CR 81 A1ce, B1+2abcde
USA (Hawaiian Is)

Achatinella mustelina CR 81 A1ce, B1+2abcde USA (Hawaiian Is)

Achatinella phaeozona CR <sup>81</sup> A Ice, B1+2abcde USA (Hawaiian Is)

Achatinella pulcherrima CR 81 Alce, BI+2abcde USA (Hawaiian Is)

Achatinella pupukanioe CR <sup>81</sup> Alce, B1+2abcde USA (Hawaiian Is)

Achatinella sowerbyana CR 81 Alce, BI+2abcde USA (Hawaiian Is)

Achatinella stewartii
CR 81 Alce, B1+2abcde
USA (Hawaiian Is)

Achatinella swiftii
CR 81 AIce, B1+2abcde
USA (Hawaiian Is)

Achatinella taeniolata
CR 81 A1ce, B1+2abcde
USA (Hawaiian Is)

Achatinella turgida
CR 81 AIce, B1+2abcde
USA (Hawaiian Is)

Achatinella viridans
CR 81 AIce, B1+2abcde
USA (Hawaiian Is)

Achatinella vulpina CR <sup>81</sup> Alce, B1+2abcd USA (Hawaiian Is)

Elasmias kitaiwojimanum VU <sup>175</sup> D1 Japan (Ogasawara-gunto)

Gulickia alexandri CR 53 B1+2abc USA (Hawaiian Is)

USA (Hawaiian Is)

Lamellidea biplicata

VU <sup>175</sup> D1 Japan (Ogasawara-gunto) Lamellidea ogasawarana

VU 175 C1 Japan (Ogasawara-gunto)

Newcombia canaliculata EN <sup>115</sup> A1c USA (Hawaiian Is)

Newcombia cumingi EN 115 Alc USA (Hawaiian Is)



Newcombia lirata EN 115 A1c USA (Hawaiian Is)

Newcombia perkinsi EN 115 A1c USA (Hawaiian Is)

Newcombia pfeifferi EN 115 A1c USA (Hawaiian Is)

Newcombia sulcata EN <sup>113</sup> A1c USA (Hawaiian Is)

Partulina confusa
CR 81 A1ce, B1+2abcde
USA (Hawaiian Is)

Partulina dubia
CR 81 A1ce, B1+2abcde
USA (Hawaiian Is)

Partulina mighelsiana EN 81 A1ce, B1+2abcde, C1+2a USA (Hawaiian Is)

Partulina perdix EN 81 A1ce, B1+2abcde, C1+2a USA (Hawaiian 1s)

Partulina physa EN 81 A1ce, B1+2abcde, C1+2a USA (Hawaiian Is)

Partulina proxima EN 81 A1ce, B1+2abcde, C1+2a USA (Hawaiian Is)

Partulina redfieldi EN 81 Alce, B1+2abcde, C1+2a USA (Hawaijan Is)

Partulina semicarinata
EN 81 A1ce, B1+2abcde, C1+2a
USA (Hawaiian 1s)

Partulina splendida
Splendid Partulina
EN 81 A1ce, B1+2abcde, C1+2a
USA (Hawaiian Is)

Partulina tappaniana
EN 81 A1ce, B1+2abcde, C1+2a
USA (Hawaiian Is)

Partulina tessellata EN 81 A1ce, B1+2abcde, C1+2a USA (Hawaiian 1s)

Partulina variabilis
EN 81 Alce, B1+2abcde, C1+2a

USA (Hawaiian Is)
Perdicella helena

EN 81 Alce, B1+2abcde, C1+2a USA (Hawaiian Is)

Family ACHATINIDAE

Archachatina bicarinata
VU 44 A1cde, B1+2b
São Tomé & Príncipe

Family AGRIOLIMACIDAE

Deroceras tarraceuse VU 115 D2 Spain

Family AMASTRIDAE

Amastra cylindrica CR <sup>53</sup> B1+2abd USA (Hawaiian 1s)

Amastra micans CR 53 B1+2abd USA (Hawaiian Is)

Amastra rubens CR <sup>53</sup> B1+2abd USA (Hawaiian Is)

Amastra spirizona CR <sup>53</sup> B1+2abd USA (Hawaiian ls)

Armsia petasus CR <sup>53</sup> B1+2abd USA (Hawaiian Is)

Laminella sanguinea CR <sup>53</sup> B1+2abd USA (Hawaiian 1s)

Leptachatina lepida EN <sup>53</sup> B1+2abd USA (Hawaiian Is)

Tropidoptera heliciformis CR <sup>53</sup> B1+2abd USA (Hawaiian 1s)

Family BRADYBAENIDAE

Helicostyla smargadina CR <sup>115</sup> A2c, B1+2c Philippines

Monadenia circumcarinata Keeled Sideband

VU 149 D2

Monadenia setosa Trinity Bristle Snail VU <sup>149</sup> D2 USA

Family BULIMULIDAE

Boninena callistoderma EN <sup>175</sup> A2e Japan (Ogasawara-gunto)

Boninena hiraseana EN <sup>175</sup> A2b

Japan (Ogasawara-gunto)

Boninena ogasawarae

EN <sup>175</sup> A2b Japan (Ogasawara-gunto) Bothriembryon bradshaw

Bothriembryon bradshaweri VU <sup>160</sup> D2 Australia Bothriembryon brazieri VU 160 D2

Australia

Bothriembryon glauerti VU <sup>98</sup> D2 Australia

Bothriembryon irvineanus VU <sup>160</sup> B1+2bc, D2 Australia

Bothriembryon perobesus EN <sup>160</sup> C2b Australia

Bothriembryon praecelcus EN <sup>160</sup> C2b Australia

Bothriembryon spenceri VU <sup>99</sup> D2 Australia

Bothriembryon whitleyi VU <sup>160</sup> D2 Australia

Drymaeus henseli VU <sup>108</sup> D2 Brazil

Napaeus isletae CR <sup>6</sup> A2c Spain (Canary Is)

Orymaeus acervatus VU 108 Alac Brazil

Placostylus bollonsi
Pupuharakeke
VU 156 D2
New Zealand

Placostylus hongii
Pupuharakeke or Flax Snail
VU 156 C1+2a, D2
New Zealand

Family CAMAENIDAE

Amplirhagada astuta EN <sup>160</sup> C2a Australia

Amplirhagada questroana EN <sup>160</sup> C2b Australia

Carinotrachia carsoniana VU <sup>160</sup> D2 Australia

Cristilabrum bubulum
EN 139 C2b
Australia

Cristilabrum buryillum EN <sup>160</sup> C2b Australia

Cristilabrum grossum EN <sup>139</sup> C2a Australia Cristilabrum isolatum VU 160 D2 Australia Cristilabrum monodon

VU 160 D2

Australia

Cristilabrum primum VU 160 D2

Australia

Cristilabrum rectum VU 160 D2

Australia

Cristilabrum simplex VU 160 D2

Cristilabrum solitudum EN 160 C2b

Australia

Cupedora evandaleana

ÉN 161 A1c Australia

Cupedora nottensis **VU** 161 D2

Australia

Damochlora millepunctata

EN 160 C2a Australia

Damochlora spina VU 160 D2

Australia

Divellomelon hillieri VU 99 D2

Australia

Glyptorhagada bordaensis

VU 161 D2 Australia

Glyptorhagada euglypta

VU 140 D2

Glyptorhagada kooringensis VU 161 D2

Australia

Glyptorhagada silveri EN 161 A2ce

Glyptorhagada tattawuppana

VU 161 D2 Australia

Hadra wilsoni VU 160 D2

Australia

Kimboraga exanimus EN 160 C2b

Australia

Kimboraga koolanensis

VU 160 D1 Australia

Kimboraga micromphala

VU 160 D2

Australia

Kimboraga yammerana

VU 160 B1+2bc, D2

Meridolum benneti

VU 165 D2 Australia

Meridolum corneovirens

EN 140 A2ce, B1+2abcd

Meridolum depressum VU 140 D2

Australia

Mouldingia occidentalis

VU 160 D2 Australia

Mouldingia orientalis

EN 160 C2b

Mussonena campbelli

VU 165 D2 Australia

Ningbingia australis VU 160 B1+2bc, D2

Ningbingia bulla VU 160 D2

Ningbingia dentiens

VU 160 D2 Australia

Ningbingia laurina

VU 160 D2 Australia

Ningbingia octava

VU 160 D2 Australia

Ningbingia res VU 160 D2

Offachloritis dryanderensis

VU 165 D2 Australia

Ordtrachia elegans

VU 160 D2 Australia

Pleuroxia hinsbyi

VU 140 B1+2bc, D2

Australia

Prototrachia sedula

VU 99 D2

Rhagada gibbensis

VU 160 D2 Australia

Rhagada harti

VŬ 160 C2b

Australia

Semotrachia euzyga

VU 99 D2 Australia

Sinumelon bednalli

VU 99 D2

Australia

Thersites mitchellae

EN 165 C2a Australia

Torresitrachia thedana VU 160 D2

Australia

Turgenitubulus aslini VU 160 B1+2bc, D2

Turgenitubulus costus

VU 160 D2 Australia

Turgenitubulus depressus

VU 160 B1+2bc, D2

Turgenitubulus foramenus VU 160 B1+2bc, D2

Australia

Turgenitubulus opiranus VU 160 B1+2bc, D2

Turgenitubulus pagodula

VU 160 D2 Australia

Turgenitubulus tanmurrana

VU 160 D2

Australia Vidumelon wattii

VU 99 D2

Australia Westraltrachia alterna

VU 139 D2 Australia

Westraltrachia inopinata

VU 139 D2 Australia

Westraltrachia lievreana VU 160 B1+2bc, D2

Australia

Westraltrachia porcata

VU 160 D2 Australia

Westraltrachia recta

VU 160 D2

Westraltrachia subtila

VU 160 D2 Australia



Westraltrachia turbinata VU <sup>160</sup> D2 Australia

### Family CARYODIDAE

Anoglypta launcestonensis Granulated Tasmanian Snail VU <sup>115</sup> D2 Australia

#### Family CERIONIDAE

Cerion nanus CR <sup>90</sup> B1+2a Cayman Islands

### Family CHAROPIDAE

Allocharopa erskinensis VU 115 D2 Australia

Cralopa colliveri VU 115 D2 Australia

Dupucharopa millestriata VU 160 D2

Australia

Geminoropa scindocataracta VU 115 D2 Australia

Hedleyoconcha ailaketoae VU <sup>141</sup> D2 Australia

Kondoconcha othnius CR <sup>154</sup> B1+2abcd French Polynesia

Mautodontha boraborensis

CR 154 Alc French Polynesia

Mautodontha ceuthma CR 154 Alc

French Polynesia
Norfolcioconch iota

VU 137 D2 Norfolk Island

Norfolcioconch norfolkensis VU 137 D2

Norfolk Island

Opanara altiapica CR <sup>154</sup> B1+2abc French Polynesia

Opanara areaensis CR <sup>154</sup> A2e, B1+2c French Polynesia

Opanara bitridentata CR 154 A2e, B1+2c French Polynesia

Opanara caliculata
CR 154 A2e, B1+2c
French Polynesia

Opanara depasoapicata CR <sup>154</sup> A2e, B1+2c French Polynesia

Opanara duplicidentata CR <sup>154</sup> A2e, B1+2c French Polynesia

Opanara fosbergi CR <sup>154</sup> A2e, B1+2c French Polynesia

Opanara megomphala CR <sup>154</sup> A2e, B1+2c French Polynesia

Opanara perahuensis CR <sup>154</sup> A2e, B1+2c French Polynesia Orangia cookei

EN 154 A2e, B1+2c French Polynesia

Orangia maituatensis CR <sup>154</sup> A2e, B1+2c French Polynesia

Orangia sporadica EN <sup>154</sup> A2e, B1+2c French Polynesia

Oreomava otwayensis VU 115 D2 Australia

Penescosta mathewsi VU <sup>137</sup> D2 Norfolk Island

Penescosta sororcula VU <sup>137</sup> D2 Norfolk Island

Pernagera gatliffi
VU 140 D2

Pilsbrycharopa tumida VU 160 D2

Pilula praetumida VU <sup>78</sup> B1+2ab Réunion

Australia

Ptychodon schuppi EN 108 Alac Brazil

Radioconus goeldi CR 108 B1+2c

Brazil

Radioconus riochcoensis EN <sup>108</sup> B1+2ab Brazil

Radiodiscus amdenus EN <sup>108</sup> Alac Brazil

Radiodiscus compactus VU <sup>108</sup> Alac Brazil Rhysoconcha atanuiensis VU <sup>154</sup> D2 French Polynesia

Rhysoconcha variumbilicata CR <sup>154</sup> A2e, B1+2c French Polynesia

Ruatara koarana CR <sup>154</sup> A2e, B1+2c French Polynesia

Ruatara oparica VU 154 D2 French Polynesia

Sinployea pitcairnensis VU 142 D2 Pitcairn Islands

# Family CLAUSILIDAE

Boettgeria obesiuscula VU 115 D2 Portugal (Madeira)

Bofilliella subarcuata VU <sup>115</sup> D2 France, Spain

Lamnifera pauli VU 115 B1+2c France, Spain

Lampedusa imitratix VU <sup>152</sup> D2 Malta

Lampedusa melitensis CR <sup>152</sup> B1+2c Malta

### Family COCHLICOPIDAE

Cryptazeca elongata VU 115 D2 Spain

Cryptazeca kobelti EN 115 B1+2c Spain

Cryptazeca monodonta VU <sup>115</sup> D2 France, Spain

Cryptazeca spelaea VU 115 D2 Spain

Cryptazeca subcylindrica
VU 115 D2
France

#### Family DISCIDAE

Discus marmorensis Marbled Disc VU <sup>149</sup> D2 USA

# Family DRAPARNAUDIIDAE

Draparnaudia anniae CR <sup>26</sup> B1+2c New Caledonia

Draparnaudia subnecata CR <sup>26</sup> A1c, B1+2c

New Caledonia

### Family ENDODONTIDAE

Hirasea acutissima EN <sup>175</sup> A1d Japan (Ogasawara-gunto)

Hirasea chichijimana EN <sup>175</sup> A2b

Japan (Ogasawara-gunto)

Hirasea diplomphalus EN <sup>175</sup> A2b Japan (Ogasawara-gunto)

Hirasea insignis EN <sup>175</sup> A1d Japan (Ogasawara-gunto)

Hirasea operculina EN <sup>175</sup> A2b Japan (Ogasawara-gunto)

Thaumatodon hystricelloides EN 115 A2ce Western Samoa

### Family ENIDAE

Euchondrus ramonensis CR <sup>87</sup> C2b, D1 Israel

Pene galilaea CR 87 A1c Israel

### Family EUCONULIDAE

Caldwellia imperfecta VU 115 B1+2a, D2 Mauritius, Réunion

Ctenophila caldwelli
EN 115 B1+2a
Mauritius

Ctenophila setiliris EN 115 B1+2a Réunion

Ctenophila vorticella VU <sup>78</sup> B1+2a, D2 Réunion

Dancea rodriguezensis EN <sup>78</sup> B1+2a Mauritius (Rodrigues)

Dupontia levis VU 78 B1+2a Mauritius

Dupontia nitella VU <sup>78</sup> B1+2ab Mauritius, Réunion Dupontia perlucida EN <sup>78</sup> B1+2a Mauritius

Dupontia poweri VU <sup>78</sup> B1+2a Mauritius

Elasmias cernicum VU 78 B1+2ab Mauritius, Réunion

Hacrochlamys lineolatus EN <sup>175</sup> A1d Japan (Ogasawara-gunto)

Lamprocystis hahajimana EN <sup>175</sup> A2b

Japan (Ogasawara-gunto)

Liardetia boninensis

VU <sup>175</sup> D1
Japan (Ogasawara-gunto)

Plegma caelatura VU <sup>78</sup> B1+2a Réunion

Thapsia snelli EN 78 B1+2a Mauritius (Rodrigues)

Trochochlamys ogasawarana CR <sup>175</sup> A1d Japan (Ogasawara-gunto)

### Family FERUSSACIIDAE

Amphorella iridescens VU 115 D2 Portugal (Madeira)

Amphorella melampoides VU 115 D2 Portugal (Madeira)

Amphorella producta VU 115 D2 Portugal (Madeira)

Cecilioides connollyi VU <sup>115</sup> D2 Gibraltar

Cecilioides eulima CR <sup>154</sup> A2c, B1+2c Portugal (Madeira)

Cylichnidia ovuliformis
VU 113 D2
Portugal (Madeira)

Sculptiferussacia clausiliaeformis VU 6 A2e, D2 Spain (Canary 1s)

### Family GEOMITRIDAE

Actinella anaglyptica VU 115 D2 Portugal (Madeira) Actinella effugiens VU 115 D2

Portugal (Madeira)

VU 115 D2
Portugal (Madeira)

Caseolus subcalliferus VU <sup>154</sup> D2 Portugal (Madeira)

Discula bicarinata VU 115 D2 Portugal (Madeira)

Discula bulweri EN 115 A2e Portugal (Madeira)

Discula cheiranthicola VU 115 D2 Portugal (Madeira)

Discula echinulata VU <sup>154</sup> D2 Portugal (Madeira)

Discula leacockiana VU <sup>154</sup> D2 Portugal (Madeira)

Discula lyelliana CR <sup>115</sup> B1+2c Portugal (Madeira)

Discula oxytropis VU 154 D2 Portugal (Madeira)

Discula tabellata EN 154 A2c, B1+2c Portugal (Madeira)

Discula tectiformis VU 115 D2 Portugal (Madeira)

Discula testudinalis CR <sup>154</sup> A2e, B1+2c Portugal (Madeira)

Discula tetrica CR 115 B1+2c Portugal (Madeira)

Discula turricula VU <sup>154</sup> D2 Portugal (Madeira)

Disculella spirulina VU 115 D2 Portugal (Madeira)

Geomitra delphinuloides CR <sup>154</sup> B1+2c Portugal (Madeira)

Geomitra moniziana EN <sup>154</sup> B1+2c Portugal (Madeira)

Geomitra tiarella EN <sup>154</sup> B1+2c Portugal (Madeira)



Family HELICARIONIDAE

Advena charon

EN 115 B1+2c Norfolk Island

Buffetia retinaculum

VU 137 D2 Norfolk Island

Diastole tenuistriata

VU 142 D2 Pitcairn Islands

Dolapex amiculus

EN 115 B1+2c Norfolk Island

Erepta odontina

EN 78 B1+2a Mauritius

Erepta stylodon CR 78 B1+2a

Mauritius

Harmogenanina argentea VU 78 B1+2ab

Réunion

Harmogenanina implicata

CR 78 B1+2c Mauritius

Helicarion leopardina

VU 115 B1+2c, D2 Australia

Helicarion porrectus

VU 161 B1+2c Australia

Helicarion rubicundus

VU 161 D2 Australia

Iredaleoconcha caporaphe

VU 115 D2 Norfolk Island

Kaliella hongkongensis

VU <sup>180</sup> D2 Hong Kong

Lutilodix imitratrix

EN 115 B1+2c Norfolk Island

Mathewsoconcha belli

EN 115 B1+2c Norfolk Island

Philonesia filiceti

VU 142 D2 Pitcairn Islands

Philonesia pitcairnensis

VU 142 D2 Pitcairn Islands

Pittoconcha concinna

VU 115 D2 Norfolk Island Thapsia buraensis

CR 172 B1+2ac

Kenya

Theskelomensor creon

VU 141 D2 Australia

Tubuaia fosbergi VU 142 D2

Pitcairn Islands

Zingis radiolata CR 172 B1+2ac

Kenya

Family HELICIDAE

Helix texta

EN 87 Alce

Helix ceratina

CR <sup>26</sup> A2c, B1+2c France

Helix obruta

VU 70 B1+2c

Portugal (Azores)

Hemicycla pouchet

VU 6 Alc Spain (Canary Is)

Hemicycla saulcyi

CR 6 A2c Spain (Canary Is)

Idiomela subplicata

VU 154 D2 Portugal (Madeira)

Lampadia webbiana

VU 115 D2 Portugal (Madeira)

Lemniscia michaudi VU 115 D2

Portugal (Madeira)

Leptaxis caldeirarum

EN <sup>70</sup> B1+2c Portugal (Azores)

Leptaxis furva VU 115 D2

Portugal (Madeira)

Leptaxis terceirana

VU 70 B1+2c Portugal (Azores)

Leptaxis vetusa

CR 70 B1+2bc Portugal (Azores)

Leptaxis wollastoni EN <sup>115</sup> B1+2c Portugal (Madeira)

Spirorbula latens

VU 115 D2 Portugal (Madeira) Theba arinagae

VU <sup>6</sup> A2c, D2 Spain (Canary 1s)

Family HELICODISCIDAE

Zilchogyra paulistana

CR 108 Alac

Brazil

Family

HELMINTHOGLYPTIDAE

Eremarionta immaculata

White Desrt Snail

VU 149 D2

USA

Eremarionta millepalmarum

Thousand Palms Desert Snail
VU 149 D2

USA

Helminthoglypta allynsmithi Merced Canyon Shoulderband

VU 149 D2

USA

Helminthoglypta callistoderma

Kern Shoulderband

EN 149 B1+2c

USA

Helminthoglypta coelata

Mesa Shoulderband VU 149 B1+2c

USA B1+2c

USA

Helminthoglypta walkeriana

Morro Shoulderband

CR 149 A1ce, B1+2bc

USA

Micrarionta facta

Santa Barbara Island Snail

VU 149 D2

USA

Micrarionta feralis

San Nicolas Island Snail

CR 149 B1+2d

USA

Micrarionta opuntia

Prickly Pear Island Snail

VU 149 D2 USA

. . . . . . .

Xerarionta intercisa Plain Cactus Snail

**VU** 149 D2

USA

Xerarionta redimita

Wreathed Cactus Snail

**VU** <sup>149</sup> D2 USA

Xerarionta tryoni

Bicolor Cactus Snail

VU 149 D2

USA

Megalobulimus parafragilior

EN 108 D1

Brazil

Bulimulus jacobi Family HYGROMIIDAE Megalobulimus proclivis VU 154 D2 CR 108 Alac Candidula setubalensis Ecuador (Galápagos Is) Brazil VU 115 D2 Bulimulus lycodus Portugal Family MEGOMPHICIDAE VU 154 D2 Helicella bierzona Ammonitella yatesii Ecuador (Galápagos Is) VU 115 D2 Tight Coin Bulimulus nesioticus VU 149 D2 Spain VU 154 D2 USA Helicella mariae Ecuador (Galápagos Is) VU 115 D2 Family OREOHELICIDAE Spain Bulimulus nux Oreohelix jugalis VU 115 D2 Helicella stiparum Boulder Pile Mountain Snail Ecuador (Galápagos Is) VU 115 D2 VU 149 D2 Spain Bulimulus ochsneri USA VU 154 D2 Hygromia golasi Oreohelix vortex VU 115 D2 Ecuador (Galápagos Is) Whorled Mountain Snail Andorra Bulimulus reibischi VU 149 D2 Obelus despreauxii VU 154 D2 **USA** VU 6 A2c Ecuador (Galápagos Is) Oreohelix waltoni Spain (Canary Is) Bulimulus rugiferus Lava Rock Mountain Snail Pyrenaearia daanidentata VU 149 D2 VU 154 D2 VU 115 D2 USA Ecuador (Galápagos Is) Spain Radiocentrum avalonense Bulimulus saeronius Pyrenaearia molae Catalina Mountain Snail VU 115 D2 VU 115 D2 CR 149 B1+2c Ecuador (Galápagos Is) Spain **USA** Bulimulus sculpturatus Suboestophora jeresae VU 154 D2 Family ORTHALICIDAE VU 115 D2 Ecuador (Galápagos Is) Bulimulus akamatus Spain VU 115 D2 Bulimulus tanneri Trochoidea gharlapsi VU 154 D2 Ecuador (Galápagos Is) VU 115 D2 Ecuador (Galápagos Is) Bulimulus alethorhytidus Malta VU 154 D2 Bulimulus unifasciatus Trochoidea molinae Ecuador (Galápagos 1s) VU 115 D2 VU 115 D2 Ecuador (Galápagos Is) Bulimulus amastroides Spain VU 154 D2 Bulimulus ustulatus Trochoidea pseudojacosta Ecuador (Galápagos 1s) VU 154 D2 CR 87 C2b, D1 Bulimulus blombergi Ecuador (Galápagos Is) Israel VU 154 D2 Trochoidea zaharensis Bulimulus wolfi Ecuador (Galápagos Is) VU 115 D2 VU 115 D2 Bulimulus calvus Ecuador (Galápagos Is) Spain VU 115 D2 Tyrrheniella josephi Leuchocharis pancheri Ecuador (Galápagos Is) VU 129 D2 CR 26 B1+2d Bulimulus cavagnaroi Italy New Caledonia VU 154 D2 Placostylus ambagiasus Family MEGALOBULIMIDAE Ecuador (Galápagos Is) Flax Snail Megalobulimus fragilion Bulimulus darwini VU 156 B1+2abcde EN 108 D1 VU 154 D2 New Zealand Ecuador (Galápagos Is) Placostylus bivaricosus Megalobulimus grandis Bulimulus eos CR 138 B1+2abcde CR 108 D1 VU 154 D2 Australia Brazil Ecuador (Galápagos Is) Placostylus eddystonensis Megalobulimus lopesi Bulimulus eschariferus VU 26 Alab EN 108 D1 VU 154 D2 New Caledonia Brazil Ecuador (Galápagos Is)

Bulimulus hirsutus

Ecuador (Galápagos Is)

VU 154 D2

Placostylus fibratus

VU 26 Alcde

New Caledonia



Placostylus parphyrostomus VU <sup>26</sup> A1c New Caledonia

# Family PARMACELLIDAE

Parmacella tenerifensis EN 6 Alac+2c Spain (Canary Is)

### Family PARTULIDAE

Eua zebrina
EN 115 A2ce
American Samoa
Partula calypso

CR 115 A2c Palau Partula clara

CR <sup>115</sup> A1c+2c French Polynesia Partula emersoni

CR <sup>115</sup> A1e+2ce Federated States of Micronesia

Partula filosa CR 115 A1c+2ce French Polynesia

Partula gibba
Fat Guam Partula
CR 115 A2ce
Guam. Northern Marianas

Partula guamensis
CR 115 A2ce
Federated States of Micronesia

Partula hyalina CR 115 Ale French Polynesia

Partula langfordi CR 115 A1e+2ce Northern Marianas

Partula leucothoe CR 115 A2e Palau

Partula martensiana
CR 115 A1ce+2e
Federated States of Micronesia

Partula otaheitana CR <sup>115</sup> Alace+2ce, B1+2abcd French Polynesia

French Polynesia
Partula radiolata

Radiolate Partula CR <sup>115</sup> A2ce, B1+2abcde Guam

Partula rosea CR <sup>115</sup> A1ce+2ce French Polynesia

Partula thetis CR 115 A1c Palau Partula varia CR <sup>115</sup> Alace, B1+2abcde

French Polynesia

Samoana annectens
EN 115 A1e
French Polynesia

Samoana attenuata EN 115 A1e French Polynesia

Samoana conica EN <sup>115</sup> A2ce American Samoa

Samoana diaphana
EN 115 Ale
French Polynesia
Samoana fragilis
EN 115 A2ce
Guam

Samoana solitaria EN <sup>115</sup> Ale French Polynesia Samoana thurstoni

EN 115 A2ce American Samoa

# Family POLYGYRIDAE

Cryptomastix magnidentata Mission Creek Oregonian VU 149 D2 USA

Family PUNCTIDAE

Christianoconcha quintalia VU <sup>138</sup> D2 Norfolk Island

# Family PUPILLIDAE

Gastrocopta boninensis VU <sup>175</sup> C1 Japan (Ogasawara-gunto)

Lauria fanalensis VU 115 B1+2bc Portugal (Madeira)

Leiostyla abbreviata
CR 154 B1+2cd
Portugal (Madeira)
Leiostyla callathiscus
VU 115 D2

Portugal (Madeira)

Leiostyla cassida

CR <sup>115</sup> B1+2c

Portugal (Madeira)

Leiostyla cheiligona

VU 115 B1+2c Portugal (Madeira)

Leiostyla concinna VU 115 D2 Portugal (Madeira) Leiostyla corneocostata VU 154 D2 Portugal (Madeira)

Leiostyla degenerata VU <sup>115</sup> D2 Portugal (Madeira)

VU 115 D2
Portugal (Madeira)

Leiostyla filicum VU 115 D2 Portugal (Madeira)

Leiostyla gibba CR <sup>154</sup> B1+2c Portugal (Madeira)

Leiostyla heterodon CR <sup>115</sup> B1+2c Portugal (Madeira)

Leiostyla laevigata VU 154 D2 Portugal (Madeira)

Leiostyla monticola VU <sup>115</sup> D2 Portugal (Madeira)

Leiostyla relevata VU 115 D2 Portugal (Madeira)

Leiostyla simulator CR <sup>115</sup> B1+2c Portugal (Madeira)

Leiostyla vermiculosa VU <sup>70</sup> B1+2c Portugal (Azores)

Nesapupa madgei VU <sup>78</sup> B1+2ab Mauritius, Réunion

Ptychalaea dedecora VU <sup>175</sup> C1 Japan (Ogasawara-gunto)

### Family RHYTIDIDAE

Occirhenea georgiana EN <sup>160</sup> C2a Australia

Rhytida clarki CR <sup>156</sup> B1+2ab New Zealand

Rhytida oconnori CR <sup>156</sup> B1+2d New Zealand

Tasmaphena lamproides VU <sup>161</sup> A2de Australia

Victaphanta compacta EN 115 A2c Australia Family STREPTAXIDAE

Gonidomus sulcatus VU 78 B2ab, C2a

Mauritius

Gonospira cylindrella VU 78 B1+2ab

Gonospira deshayesi EN 78 B1+2ab Réunion

Gonospira duponti CR 78 C2b Mauritius

Gonospira holostoma VU 78 B1+2ab

Gonospira madgei VU 78 B1+2ab Mauritius

Gonospira striaticostus VU 78 D2 Mauritius

Gonospira teres VU 78 D2

Gonospira turgidula VU 78 B1+2ab Réunion

Gonospira uvula EN 78 B1+2a Réunion

Gulella antelmeana EN 78 B1+2a

Mauritius

Gulella taitensis CR 172 B1+2ac Kenya

Microstrophia modesta EN 78 B1+2ab Mauritius

Microstrophia nana VU 78 B1+2a, D2 Mauritius

Family STROPHOCHEILIDAE

Gonyostomus gonyostomus CR 108 Alac Brazil

Gonyostomus insularis

VU 108 D1

Brazil

Hirinaba curytibana

CR 108 Alac Brazil

Family SUBULINIDAE

Euonyma curtissima EN 172 B1+2ac

Kenya

Subuliniscus arambourgi

EN 172 B1+2ac

Kenva

Family SUCCINEIDAE

Boninosuccinea ogasawarae VU 175 D2

Japan (Ogasawara-gunto)

Boninosuccinea punctulispira

VU 175 D2 Japan (Ogasawara-gunto)

Oxyloma kanabense Kanab Amber Snail CR 149 B1+2d

USA

Succinea piratarum EN 115 A2c Guam

Succinea quadrasi EN 115 A2e Guam

Family VALLONIIDAE

Spelaeodiscus tatricus VU 115 D2 Slovakia

Family VERTIGINIDAE

Truncotellina arcyensis EN 29 B1+2c France

Family VITRINIDAE

Insulivitrina reticulata

EN 6 A2c Spain (Canary Is) Family ZONITIDAE

Oxychilus amaltheae VU 119 D2

Oxychilus agostinhoi VU 70 B1+2c Portugal (Azores) Oxychilus lineolatus

VU 70 B1+2c Portugal (Azores)

Trochomorpha apia EN 115 A2ce

American Samoa Vitrea pseudotrolli

VU 26 D2 France, Italy

Zonitoides jaccetanicus EN 115 B1+2c Spain

Class ENOPLA

Order HOPLONEMERTEA

Family PROSORHOCHMIDAE

Antiponemertes allisonae VÛ 185 D2 New Zealand

Katechonemertes nightingaleensis VU 185 D2

St Helena (Tristan da Cunha)

Class ANTHOZOA

Order ACTINIARIA

Family EDWARDSHDAE

Nematostella vectensis Starlet Sea Anemone VU 185 Alce Canada, USA, United Kingdom

Order GORGONACEA

Family PLEXAURIDAE

Eunicella verrucosa

Broad Sea Fan VU 185 A1d

France, Ireland, Mauritania, Morocco, Portugal, Spain, United Kingdom

# Lower Risk: conservation dependent

### Class MAMMALIA

### Order DIPROTODONTIA

# Family POTOROIDAE

Bettongia penicillata 13 Woylie Australia

### Order CHIROPTERA

### Family EMBALLONURIDAE

Emballonura raffrayana 42 Raffray's Sheath-tailed Bat Indonesia, Papua New Guinea, Solomon Islands

# Family RHINOLOPHIDAE

Rhinolophus ferrumequinum 42 Afghanistan, Algeria, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, India, Iran, Iraq, Israel, Italy, Japan, Kyrgyzstan, Lebanon, Luxembourg, Macedonia, Morocco, Nepal, Netherlands, North Korea, Poland, Portugal, Romania, Russia, Saudi Arabia, Slovakia, Slovenia, South Korea, Spain, Switzerland, Syria, Tunisia, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan, Yugoslavia

### Order PRIMATES

# Family TARSIIDAE

Tarsius syrichta 143
Philippine Tarsier
Philippines

### Family CERCOPITHECIDAE

Macaca nigrescens 143
Dumoga-bone Macaque
Indonesia

Macaca thibetana 143
Tibetan Macaque
China

### Order CARNIVORA

### Family CANIDAE

Urocyon littoralis 36 Island Grey Fox USA

Vulpes velox 36 Swift Fox Canada (ex), USA

### Family HYAENIDAE

Crocuta crocuta 92 Spotted Hyaena

Angola, Botswana, Cameroon, Ethiopia, Gabon, Gambia, Guinea, Kenya, Malawi, Mauritania, Mozambique, Namibia, Nigeria, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

### Family URSIDAE

Ursus maritimus 136

Polar Bear

Canada, Greenland, Norway (Svalbard & Jan Mayen ls), Russia, USA

#### Order CETACEA

### Family BALAENIDAE

Balaena mysticetus 41
Bowhead Whale

[Arctic Sea, Atlantic (northeast, northwest), Pacific (northeast, northwest)]

Eubalaena australis 41 Southern Right Whale

[Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (southeast, southwest)]

# Family BALAENOPTERIDAE

Balaenoptera bonarensis 41

Southern Minke Whale
[Atlantic (Antarctic), Indian Ocean
(Antarctic), Pacific (Antarctic)]

### Family ESCHRICHTIIDAE

Eschrichtius robustus 41
Gray Whale

[Arctic Sea, Pacific (northeast, northwest, western central)]

### Family DELPHINIDAE

Globicephala macrorhynchus 41 Short-finned Pilot Whale

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

# Orcinus orca 41

Killer Whale

[Arctic Sea, Atlantic (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (Antarctic, eastern, western), Mediterranean and Black Sea, Pacific (Antarctic, eastern central, northeast, northwest, southeast, southwest, western central)]

#### Stenella attenuata 41

Pantropical Spotted Dolphin
[Atlantic (eastern central, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, northwest, southeast, southwest, western central)]

# Stenella coeruleoalba 41

Striped Dolphin

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

# Stenella longirostris 41

Spinner Dolphin

[Atlantic (eastern central, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, northwest, southeast, southwest, western central)]

#### Family PHOCOENIDAE

Phocoenoides dalli 41

Dall's Porpoise

Canada, Japan, Mexico, North Korea, Russia, South Korea, USA [Pacific (eastern central, northeast, northwest)]

# Family ZIPHIIDAE

Berardius arnuxii 41

Arnoux's Beaked Whale [Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern central, western central), Pacific (Antarctic, southeast, southwest)]

Berardius bairdii 41

Baird's Beaked Whale [Pacific (eastern central, northeast, northwest)]

Hyperoodon ampullatus 41
Northern Bottlenose Whale
[Atlantic (northeast, northwest)]

Hyperoodon planifrons <sup>41</sup>
Southern Bottlenose Whale
[Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (Antarctic, southeast, southwest)]

#### Order PERISSODACTYLA

### Family RHINOCEROTIDAE

Ceratotherium simum 3 White Rhinoceros

Botswana [re-int], Côte d'Ivoire, Kenya, Mozambique (ex?), Namibia, South Africa, Sudan (ex?), Swaziland, Zaire, Zambia (ex?), Zimbabwe

#### Order ARTIODACTYLA

Family CAMELIDAE

Vicugna vicugna 164 Vicuña

Argentina, Bolivia, Chile, Peru

### Family GIRAFFIDAE

Giraffa camelopardalis 9

Angola, Botswana, Cameroon, Central African Republic, Chad, Eritrea, Ethiopia, Kenya, Mali (ex?), Mauritania (ex), Mozambique (ex?), Namibia, Niger, Nigeria, Rwanda [int], Senegal (ex), Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe

### Family BOVIDAE

Aepyceros melampus 9 Impala

Angola, Botswana, Kenya, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe Alcelaphus buselaphus 9

Common Hartebeest

Algeria (ex), Angola, Benin,
Botswana, Burkina Faso, Cameroon,
Central African Republic, Chad,
Côte d'Ivoire, Egypt (ex), Ethiopia,
Gambia (ex?), Ghana, Guinea,
Guinea-Bissau, Kenya, Lesotho (ex),
Mali, Morocco (ex), Namibia, Niger,
Nigeria, Senegal, Somalia (ex),
South Africa, Sudan, Swaziland,
Tanzania, Togo, Tunisia (ex),
Uganda, Zaire, Zimbabwe

Alcelaphus lichtensteinii 9

Lichtenstein's Hartebeest Angola, Burundi (ex), Malawi, Mozambique, South Africa, Tanzania, Zaire, Zambia, Zimbabwe fintl

Antidorcas marsupialis 9 Springbok

Angola, Botswana, Lesotho (ex), Namibia, South Africa, Swaziland?

Bison bison 22

American Bison Canada, USA

Boselaphus tragocamelus 9

Nilgai

Japan

Bangladesh (ex), India, Nepal, Pakistan, USA [int]

Capricornis crispus 37
Japanese Serow

Cephalophus harveyi 9

Harvey's Red Duiker Ethiopia, Kenya, Somalia, Tanzania

Cephalophus natalensis 9

Natal Red Duiker

Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe?

Cephalophus rufilatus?

Red-flanked Duiker

Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Togo, Uganda (ex?), Zaire

Connochaetes gnou 9

Swaziland

Black Wildebeest Lesotho, Namibia [int], South Africa,

Connochaetes taurinus 9

Blue & White-bearded Wildebeest Angola, Botswana, Kenya, Malawi (ex), Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe Damaliscus dorcas 9

Bontebok

Botswana [int], Lesotho, Namibia [int], South Africa, Swaziland, Zimbabwe [int]

Damaliscus lunatus 9

Topi

Angola, Benin, Botswana, Burkina Faso, Burundi (ex), Cameroon, Central African Republic, Chad, Ethiopia, Gambia (ex), Guinea (ex?), Guinea-Bissau (ex), Kenya, Mali (ex), Mauritania (ex), Mozambique (ex), Namibia, Niger, Nigeria, Rwanda, Senegal (ex), Somalia, South Africa, Sudan, Swaziland (ex), Tanzania, Togo (ex?), Uganda, Zaire, Zambia, Zimbabwe

Gazella bennetti 9

Chinkara

Afghanistan?, India, Iran, Pakistan

Gazella gazella 9

Mountain Gazelle

Egypt (ex), Iran [int], Israel, Jordan, Lebanon (ex), Oman, Saudi Arabia, Syria?, United Arab Emirates, Yemen

Gazella granti?

Grant's Gazelle

Ethiopia, Kenya, Somalia, Sudan, Tanzania, Uganda

Gazella thomsonii 9

Thomson's Gazelle Ethiopia, Kenya, Sudan, Tanzania

Hippotragus equinus 9

Roan Antelope

Angola, Benin, Botswana, Burkina Faso, Burundi (ex), Cameroon, Central African Republic, Chad, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

Hippotragus niger 9

Sable Antelope

Angola, Botswana, Kenya, Malawi, Mozambique, Namibia, South Africa, Swaziland [int], Tanzania, Zaire, Zambia, Zimbabwe

Kobus ellipsiprymnus 9

Waterbuck

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Ethiopia, Gabon, Gambia (ex?), Ghana, Guinea, Guinea-Bissau, Kenya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra



Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

### Kobus kob9

Kob

Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Ethiopia, Gambia (ex), Ghana, Guinea, Guinea-Bissau, Kenya (ex), Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone (ex), Sudan, Tanzania (ex), Togo, Uganda, Zaire.

### Kobus leche?

Lechwe

Angola, Botswana, Namibia, South Africa [int], Zaire, Zambia

### Kobus vardoni 9

Puku

Angola, Botswana, Malawi, Namibia, Tanzania, Zambia, Zimbabwe

#### Litocranius walleri9

Gerenuk

Djibouti, Ethiopia, Kenya, Somalia, Tanzania

### Neotragus moschatus 9

Kenya, Malawi, Mozambique, South Africa, Tanzania, Zimbabwe

### Oreotragus oreotragus 9

Klipspringer

Angola, Botswana, Burundi (ex), Central African Republic, Djibouti, Eritrea, Ethiopia, Kenya, Lesotho?, Malawi, Mozambique, Namibia, Nigeria, Rwanda, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe

# Oryx gazella 9

Gemsbok

Angola, Botswana, Djibouti, Eritrea, Ethiopia, Kenya, Namibia, Somalia, South Africa, Sudan, Tanzania, Uganda, Zimbabwe

# Ourebia ourebi9

Angola, Benin, Botswana, Burkina Faso, Burundi (ex), Cameroon, Central African Republic, Chad, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Malawi, Mali, Mozambique, Namibia?, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

# Ovis canadensis 37

Bighorn Sheep

Canada, Mexico, USA

Ovis nivicola 37

Snow Sheep

Russia

Pelea capreolus 9

Grey Rhebok

Botswana (ex), Lesotho, South Africa, Swaziland

### Raphicerus melanotis 9

Cape Grysbok South Africa

# Raphicerus sharpei 🤊

Sharpe's Grysbok

Botswana, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zaire, Zambia, Zimbabwe

#### Redunca arundinum 9

Southern Reedbuck

Angola, Botswana, Congo (ex?), Gabon (ex?), Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zaire, Zambia, Zimbabwe

# Redunca fulvorufula 9

Mountain Reedbuck

Botswana, Cameroon, Ethiopia, Kenya, Lesotho, Mozambique, Nigeria, South Africa, Sudan, Swaziland, Tanzania, Uganda

#### Redunca redunca 9

Bohor Reedbuck

Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, Sudan, Tanzania, Togo, Uganda, Zaire

### Rupicapra pyrenaica 37 Southern Chamois

Italy, Spain

### Syncerus caffer 9 African Buffalo

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Gabon, Gambia (ex), Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe

### Tragelaphus angasii 🤊

Nyala

Botswana [int], Malawi, Mozambique, Namibia [int], South Africa, Swaziland, Zimbabwe

### Tragelaphus imberbis 9

Lesser Kudu

Ethiopia, Kenya, Saudi Arabia (ex?), Somalia, Sudan, Tanzania, Uganda, Yemen (ex?)

### Tragelaphus oryx9

Common Eland

Angola, Botswana, Burundi (ex), Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe

# Tragelaphus strepsiceros 9

Greater Kudu

Angola, Botswana, Central African Republic, Chad, Diibouti, Eritrea, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia, Zimbabwe

### Order RODENTIA

### Family SCIURIDAE

Cynomys parvidens 82 Utah Prairie Dog USA

Marmota bobak 173

Belarus, Kazakhstan, Russia, Ukraine

#### Family HETEROMYIDAE

Dipodomys stephensi 82 Stephens' Kangaroo Rat **USA** 

### Family MURIDAE

Eolagurus luteus 173

China, Kazakhstan (ex), Mongolia

Pseudomys shortridgei 15 Heath Rat

#### Class AVES

Australia

#### Order GRUIFORMES

Family GRUIDAE

Grus monacha 21

Hooded Crane China, Russia. \* Japan, North Korea, South Korea, Taiwan

#### Order CHARADRIIFORMES

Family LARIDAE

Larus audouinii 21 Audouin's Gull

Algeria, Cyprus, France, Greece, Italy, Morocco, Spain, Tunisia, Turkey. \* Gabon, Gibraltar, Libya, Mauritania, Senegal, Western Sahara

### Order COLUMBIFORMES

### Family COLUMBIDAE

Columba trocaz 21 Madeira Laurel Pigeon Portugal (Madeira)

# Order PASSERIFORMES

# Family MUSCICAPIDAE

Acanthiza katherina 21 Mountain Thornbill Australia

Pachycephala rufogularis 21 Red-lored Whistler

Sericornis keri <sup>21</sup> Atherton Scrubwren Australia

Stipiturus mallee 21 Mallee Emuwren Australia

#### Family MELIPHAGIDAE

Lichenostomus hindwoodi 21 Eungella Honeyeater Australia

# Family FRINGILLIDAE

Fringilla teydea 21 Blue Chaffinch Spain (Canary Is)

### Family CALLAEIDAE

Philesturnus carunculatus 21 Saddleback New Zealand

# Family PTILONORHYNCHIDAE

Prionodura newtoniana 21 Golden Bowerbird Australia

# Class REPTILIA

# Order TESTUDINES

# Family PELOMEDUSIDAE

Podocnemis expansa 176 South American River Turtle Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Trinidad and Tobago, Venezuela

### Class AMPHIBIA

### Order ANURA

# Family DISCOGLOSSIDAE

### Bombina bombina 65

Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Germany, Greece, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Turkey, Ukraine, Yugoslavia

#### Order CAUDATA

# Family SALAMANDRIDAE

Triturus cristatus 65
Great Crested Newt
Austria, Belarus, Belgium, Czech
Republic, Denmark, Estonia,
Finland, France, Germany, Hungary,
Latvia, Lithuania, Luxembourg,
Moldova, Netherlands, Norway,
Poland, Russia, Slovakia, Sweden,
Ukraine, United Kingdom

# Class ACTINOPTERYGII

# Order CYPRINIFORMES

#### Family CYPRINIDAE

Barbus treurensis 158 Treur River Barb South Africa

Puntius cumingii 134 Two Spot Barb Sri Lanka

Puntius nigrofasciatus 134 Black Ruby Barb Sri Lanka

Puntius pleurotaenia 134 Side Striped Barb Sri Lanka

Puntius titteya 134 Cherry Barb Sri Lanka

Rasbora vaterifloris 134 Vateria Flower Rasbora Sri Lanka

### Family BALITORIDAE

Acanthocobitis urophthalmus 134
Banded Mountain Loach
Sri Lanka

#### Order PERCIFORMES

# Family SPARIDAE

Lithognatus lithognathus 158 White Steenbras South Africa

# Family CICHLIDAE

Serranochromis meridianus 158 Lowveld Largemouth South Africa

### Family GOBIIDAE

Mistichthys luzonensis 185 Sinarapan Philippines

### Family BELONTIIDAE

Belontia signata 134 Combtail Sri Lanka

Malpulutta kretseri 134 Ornate Paradisefish Sri Lanka

### Class CRUSTACEA

### Order ANOSTRACA

#### Family ARTEMIIDAE

Artemia monica 95 Mono Lake Brine Shrimp USA

# Order CYCLOPOIDA

#### Family CYCLOPIDAE

Metacyclops campestris 145 Brazil

Muscocyclops bidenatus 145 Brazil

Muscocyclops therasiae 145
Brazil

Ponticyclops boscoi 145 Brazil

Thermocyclops parvus 145 USA

### Order HARPACTICOIDA

### Family CANTHOCAMPTIDAE

Attheyella yemanjae 145 Brazil

Canthocamptus campaneri 145 Brazil



Family

### **PARASTENOCARIDIDAE**

Murunducaris juneae 145 Brazil

### Class INSECTA

# Order ORTHOPTERA

### Family ACRIDIDAE

Spaniacris deserticola 146 Spanistic Desert Grasshopper Mexico, USA

### Family GRYLLIDAE

Neonemobius eurynotus 146 Bay Area Ground Cricket USA

### Family STENOPELMATIDAE

Stenopelmatus nigrocapitatus 146 Black-headed Jerusalem Cricket USA

#### Class BIVALVIA

### Order UNIONOIDA

### Family UNIONIDAE

Simpsonaias ambigua 24 USA

### Order VENEROIDA

# Family TRIDACNIDAE

# Hippopus hippopus 181 Bear Paw Clam

American Samoa (ex?), Australia, Federated States of Micronesia, Fiji (ex?), Guam (ex?), India? (Andaman & Nicobar Is), Indonesia, Japan (Nansei-shoto (ex?), Ogasawara-gunto), Kiribati, Malaysia, Marshall Islands, Myanmar, New Caledonia, Northern Marianas (ex?), Palau, Papua New Guinea, Philippines, Singapore, Solomon Islands, Taiwan (ex?), Thailand?, Tonga (ex?), Tuvalu, Vanuatu, Western Samoa (ex?)

### Hippopus porcellanus 181 China Clam

Indonesia, Palau, Philippines

# Tridacna maxima 181

Small Giant Clam

American Samoa, Australia, British Indian Ocean Territory, China, Cook Islands, Egypt, Federated States of Micronesia, Fiji, French Polynesia, Guam, India (Andaman & Nicobar Is, Lakshadweep), Indonesia, Japan, Kenya, Kiribati, Madagascar, Malaysia, Maldives, Marshall Islands, Mauritius, Mozambique, Myanmar, New Caledonia, Northern Marianas, Palau, Papua New Guinea, Philippines, Pitcairn Islands, Saudi Arabia, Seychelles, Singapore, Solomon Islands, South Africa, Sri Lanka, Taiwan, Thailand, Tokelau, Tonga, Tuvalu, US Minor Pacific Islands, Vanuatu, Viet Nam, Western Samoa

# Tridacna squamosa 181

Scaly Clam

American Samoa, Australia, British Indian Ocean Territory, Egypt, Federated States of Micronesia, Fiji, French Polynesia, Guam (ex?), India (Andaman & Nicobar Is, Lakshadweep), Indonesia, Japan (ex?), Kenya, Kiribati, Madagascar. Malaysia, Maldives, Marshall Islands, Mauritius, Mozambique, Myanmar, New Caledonia, Northern Marianas (ex?), Palau, Papua New Guinea, Philippines, Saudi Arabia, Seychelles, Singapore, Solomon Islands, South Africa, Sri Lanka, Thailand, Tokelau, Tonga, Tuvalu, USA [int] (Hawaiian Is), Vanuatu, Viet Nam, Western Samoa

# Class GASTROPODA

### Order MESOGASTROPODA

# Family CYCLOPHORIDAE

Craspedoma hespericum 70
Portugal (Azores)

Craspedoma lyonnetianum 115 Portugal (Madeira)

Craspedoma trochoideum 115 Portugal (Madeira)

### Order STYLOMMATOPHORA

# Family BULIMULIDAE

Napaeus nanodes 6 Spain (Canary Is)

### Family GEOMITRIDAE

Caseolus leptostictus 115 Portugal (Madeira)

Lemniscia calva 115 Portugal (Madeira)

### Family HELICIDAE

Hemicycla adansoni 6 Spain (Canary Is)

Hemicycla inutilis 6 Spain (Canary Is)

### Family HYGROMIDAE

Canariella leprosa <sup>6</sup> Spain (Canary Is)

Canariella pthonera 6 Spain (Canary Is)

## Family PUPILLIDAE

Leiostyla laurinea 115 Portugal (Madeira)

# Family VERTIGINIDAE

Pupisoma orcula 115
Federated States of Micronesia

### Vertigo angustior 115

Armenia, Austria, Azerbaijan, Belarus, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Liechtenstein, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Sweden, Switzerland, Ukraine, United Kingdom

# Vertigo genesii 115

Finland, Germany, Norway, Poland, Romania, Russia, Sweden, Switzerland, United Kingdom

# Vertigo geyerii 115

Austria, Čzech Republic, Denmark, Finland, Germany, Ireland, Latvia, Lithuania, Norway, Poland, Slovakia, Sweden, Switzerland, United Kingdom

# Vertigo moulinsiana 167

Algeria, Austria, Azerbaijan, Belarus, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Lithuania, Morocco, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine



# Lower Risk: near threatened

### Class MAMMALIA

### Order DIDELPHIMORPHIA

# Family DIDELPHIDAE

Caluromys lanatus 121
Argentina, Bolivia, Brazil,
Colombia, Ecuador, Paraguay, Peru,
Venezuela

Caluromys philander 121
Brazil, French Guiana, Guyana,
Suriname, Trinidad and Tobago,
Venezuela

Chironectes minimus 121
Argentina, Belize, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
El Salvador, French Guiana,
Guatemala, Guyana, Honduras,
Mexico, Nicaragua, Panama,
Paraguay, Peru, Suriname, Venezuela

Gracilinanus agilis 121
Argentina, Bolivia, Brazil, Paraguay,
Peru, Uruguay

Gracilinanus marica 121 Colombia, Venezuela

Gracilinanus microtarsus 121 Brazil

Marmosa lepida 121
Bolivia, Brazil?, Colombia, Ecuador, Peru, Suriname

Marmosops fuscatus 121 Colombia, Trinidad and Tobago, Venezuela

Marmosops impavidus 121 Colombia, Ecuador, Panama, Peru, Venezuela

Marmosops incanus 121 Brazil

Marmosops invictus 121 Panama

Marmosops parvidens 121 Brazil, Colombia, Guyana, Peru, Suriname, Venezuela

Micoureus alstoni 121 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama

Micoureus constantiae 121 Argentina, Brazil, Colombia

Monodelphis americana 121 Brazil Monodelphis dimidiata 121 Argentina, Brazil, Uruguay

Monodelphis iheringi 121 Brazil

Thylamys macrura 121 Brazil, Paraguay

### Order DASYUROMORPHIA

### Family DASYURIDAE

Antechinus godmani 13 Atherton Antechinus Australia

Antechinus leo 13 Cinnamon Antechinus Australia

Dasyurus hallucatus 13 Northern Quoll Australia

Dasyurus viverrinus 13
Eastern Quoll
Australia

Phascogale tapoatafa 13 Brush-tailed Phascogale Australia

### Order DIPROTODONTIA

#### Family PHASCOLARCTIDAE

Phascolarctos cinereus 13 Koala Australia

# Family POTOROIDAE

Bettongia gaimardi 13 Tasmanian Bettong Australia

Wyulda squamicaudata 13 Scaly-tailed Possum Australia

### Family MACROPODIDAE

Dendrolagus bennettianus 13 Bennett's Tree-kangaroo Australia

Dendrolagus lumholtzi <sup>13</sup> Lumholtzi's Tree-kangaroo Australia Lagorchestes conspicillatus 13
Spectacled Hare-wallaby
Australia

Macropus bernardus 13 Black Wallaroo Australia

Macropus irma 13 Western Brush Wallaby Australia

Macropus parma 13
Parma Wallaby
Australia, New Zealand [int]

Petrogale burbidgei 13
Monjon
Australia

Petrogale coenensis 13 Cape York Rock-wallaby Australia

Petrogale concinna 13 Nabarlek Australia

Petrogale sharmani 13 Mountain Claro Rock-wallaby Australia

Petrogale xanthopus 13
Yellow-footed Rock-wallaby
Australia

### Family PSEUDOCHEIRIDAE

Hemibelideus lemuroides 13 Lemuroid Ringtail Possum Australia

Pseudochirops archeri 13 Green Ringtail Possum Australia

Pseudochirulus cinereus 13
Daintree River Ringtail Possum
Australia

Pseudochirulus herbertensis 13 Herbert River Ringtail Possum Australia

#### Family PETAURIDAE

Petaurus australis 13 Yellow-bellied Glider Australia

Petaurus norfolcensis 13
Squirrel Glider
Australia

#### Order XENARTHRA

# Family DASYPODIDAE

Cabassous tatouay 61
Argentina, Brazil, Paraguay, Uruguay

Tolypeutes matacus 61
Argentina, Bolivia, Brazil, Paraguay

### Order INSECTIVORA

### Family ERINACEIDAE

Hylomys sinensis % China, Myanmar, Viet Nam

# Family SORICIDAE

Blarinella wardi %

Southern Short-tailed Shrew China, Myanmar

Crocidura thalia % Ethiopia

Sorex macrodon 15 Mexico

Sorex oreopolus 15 Mexico

#### Order CHIROPTERA

# Family PTEROPODIDAE

Acerodon celebensis 42 Sulawesi Fruit Bat Indonesia

Aethalops alecto 42 Pygmy Fruit Bat Brunei, Indonesia, Malaysia

Casinycters argynnis 42 Short-palate Fruit Bat Cameroon, Zaire

Cynopterus nusatenggara 42 Indonesia

Dobsonia exoleta 42 Sulawesi Naked-backed Fruit Bat Indonesia

Dobsonia minor 42 Lesser Naked-backed Fruit Bat Indonesia, Papua New Guinea

Dobsonia praedatrix 42 New Britain Naked-backed Bat Papua New Guinea

Dyacopterus spadiceus 42 Dyak Fruit Bat Brunei, Indonesia, Malaysia, Philippines

Epomophorus angolensis 42 Angolan Epauletted Fruit Bat Angola, Namibia Nyctimene aello 42

Broad-striped Tube-nosed Fruit Bat Papua New Guinea

Nyctimene certans 42

Indonesia, Papua New Guinea

Nyctimene cyclotis 42

Round-eared Tube-nosed Fruit Bat Indonesia, Papua New Guinea

Paranyctimene raptor 42

Lesser Tube-nosed Fruit Bat Indonesia, Papua New Guinea

Pteropus chrysoproctus 42

Ambon Flying-fox Indonesia

Pteropus temmincki 42 Indonesia

Pteropus vetulus 42 New Caledonia

Rousettus bidens 42

Rousettus obliviosus 42 Comoros

Styloctenium wallacei 42 Indonesia

Thoopterus nigrescens 42 Swift Fruit Bat Indonesia, Philippines?

### Family EMBALLONURIDAE

Balantiopteryx io 42

Belize, Guatemala, Mexico Cyttarops alecto 42

Brazil, Costa Rica, Guyana, Nicaragua

Diclidurus isabellus 42 Brazil, Venezuela

Saccolaimus flaviventris 42 Australia, Papua New Guinea

Saccolaimus peli 42
Angola, Cameroon, Congo, Gabon,
Ghana, Kenya, Liberia, Nigeria,
Uganda, Zaire

Saccopteryx gymnura 42 Brazil, Venezuela?

Taphozous australis 42 Australia, Papua New Guinea

# Family NYCTERIDAE

Nycteris aurita 42

Ethiopia, Kenya, Somalia, Tanzania

Nycteris intermedia 42

Angola, Cameroon, Côte d'Ivoire, Gabon, Ghana, Tanzania, Zaire

Nycteris woodi 42

Cameroon, Ethiopia, Malawi, Mozambique, Somalia?, South Africa, Tanzania, Zambia, Zimbabwe

# Family MEGADERMATIDAE

Cardioderma cor 42

Ethiopia, Kenya, Somalia, Sudan, Tanzania, Uganda

# Family RHINOLOPHIDAE

Cloeotis percivali 42

Botswana, Kenya, Mozambique, South Africa, Swaziland, Tanzania, Zaire, Zambia, Zimbabwe

Coelops robinsoni 42 Malaysia

Hipposideros camerunensis 42 Cameroon, Kenya, Zaire

Hipposideros coronatus 42 Philippines

Hipposideros curtus 42 Cameroon, Equatorial Guinea, Nigeria?

Hipposideros dinops 42 Indonesia, Papua New Guinea, Solomon Islands

Hipposideros edwardshilli 42 Papua New Guinea

Hipposideros fuliginosus 42 Cameroon, Congo, Equatorial Guinea, Ethiopia, Ghana, Liberia, Sierra Leone, Togo, Zaire

Hipposideros halophyllus 42 Thailand

Hipposideros hypophyllus 42 India

Hipposideros jonesi 42 Burkina Faso, Equatorial Guinea, Ghana, Mali, Nigeria, Sierra Leone, Sudan

Hipposideros lekaguli 42 Malaysia, Philippines, Thailand

Hipposideros lylei 42 Malaysia, Myanmar, Thailand

Hipposideros macrobullatus 42 Indonesia

Hipposideros madurae 42 Indonesia

Hipposideros obscurus 42 Philippines

Hipposideros pratti 42 China, Malaysia, Myanmar, Thailand, Viet Nam

Hipposideros pygmaeus 42 Philippines

Hipposideros schistaceus 42 India

Hipposideros semoni 42 Australia, Papua New Guinea

Hipposideros sorenseni 42 Indonesia



Hipposideros stenotis 42 Australia

Hipposideros sumbae 42 Indonesia

Hipposideros wollastoni 42 Indonesia, Papua New Guinea

Rhinolophus alcyone 42

Cameroon, Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Nigeria, Senegal, Sierra Leone?, Sudan, Uganda, Zaire

Rhinolophus blasii 42

Afghanistan, Albania, Algeria, Bulgaria, Cyprus, Ethiopia, Greece, Iran, Israel, Italy, Jordan, Morocco, Pakistan, Romania, Somalia, South Africa, Syria, Tunisia, Turkey, Turkmenistan, Yemen, Yugoslavia, 7aire

Rhinolophus canuti 42 Indonesia

Rhinolophus celebensis 42 Indonesia

Rhinolophus cornutus 42 China?, Japan Rhinolophus creaghi 42

Indonesia, Malaysia

Rhinolophus guineensis 42 Guinea, Liberia, Sierra Leone

Rhinolophus maclaudi 42 Guinea, Liberia, Rwanda, Uganda, Zaire

Rhinolophus monoceros 42 Taiwan

Rhinolophus nereis 42 Indonesia

Rhinolophus philippinensis 42 Australia, Indonesia, Malaysia, Papua New Guinea, Philippines

Rhinolophus rufus 42 Philippines

Rhinolophus shameli 42 Cambodia, Malaysia, Myanmar, Thailand

Rhinolophus silvestris 42 Congo, Gabon

Rhinolophus thomasi 42 China, Myanmar, Thailand, Viet Nam

Rhinolophus virgo 42 Philippines

Rhinolophus yunanensis 42 China, India, Thailand

# Family MORMOOPIDAE

Mormoops blainvillii <sup>42</sup>
Cuba, Dominican Republic, Haiti,
Jamaica, Puerto Rico

Pteronotus quadridens 42
Cuba, Dominican Republic, Haiti,
Jamaica, Puerto Rico

### Family PHYLLOSTOMIDAE

Anoura latidens 42 Venezuela

Ardops nichollsi 42

Dominica, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, St Lucia, St Vincent

Artibeus amplus 42 Colombia, Venezuela

Artibeus concolor 42
Brazil, Colombia, French Guiana,
Peru, Venezuela

Artibeus fimbriatus 42 Brazil, Paraguay

Artibeus inopinatus 42 El Salvador, Honduras, Nicaragua

Artibeus obscurus 42
Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru, Venezuela

Brachyphylla nana 42
Bahamas, Cayman Islands, Cuba,
Dominican Republic, Haiti, Jamaica
(ex), Turks and Caicos Islands

Choeroniscus godmani 42 Colombia, Costa Rica, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Suriname, Venezuela

Choeroniscus intermedius 42 Brazil, French Guiana, Peru, Trinidad and Tobago

Choeronycteris mexicana 42 Guatemala, Honduras, Mexico, USA

Diphylla ecaudata 42
Belize, Bolivia, Brazil, Colombia,
Costa Rica, Ecuador, El Salvador,
Guatemala, Honduras, Mexico,
Nicaragua, Panama, Peru, USA,
Venezuela

Glossophaga morenoi 42 Mexico

Lonchorhina orinocensis 42 Colombia, Venezuela

Micronycteris daviesi 42
Costa Rica, French Guiana, Guyana,
Honduras, Panama, Peru, Suriname,
Trinidad and Tobago, Venezuela

Micronycteris sylvestris 42
Brazil, Colombia, Costa Rica,
Ecuador, Honduras, Mexico,
Nicaragua, Panama, Peru, Trinidad
and Tobago, Venezuela

Monophyllus plethodon 42 Anguilla, Antigua and Barbuda, Barbados, Dominica, Guadeloupe, Martinique, Montserrat, St Lucia, St Vincent

Phyllonycteris poeyi 42 Cuban Flower Bat Cuba, Dominican Republic, Haiti

Phyllops falcatus 42 Cayman Islands, Cuba, Haiti

Phyllostomus latifolius 42 Colombia, French Guiana Platyrrhinus aurarius 42

Colombia, Suriname, Venezuela Platyrrhinus infuscus 42

Bolivia, Brazil, Colombia, Ecuador, Peru Platyrrhinus umbratus 42

Colombia, Panama?, Venezuela Rhinophylla alethina <sup>42</sup> Colombia, Ecuador

Rhinophylla fischerae 42 Brazil, Colombia, Ecuador, Peru

Sturnira aratathomasi 42 Colombia, Ecuador, Peru, Venezuela

Sturnira bidens 42
Brazil?, Colombia, Ecuador, Peru,
Venezuela

Sturnira magna 42 Bolivia, Colombia, Ecuador, Peru

Sturnira mordax 42 Costa Rica, Panama

Tonatia evotis 42 Belize, Guatemala, Honduras

Vampyressa bidens 42 Bolivia, Brazil, Colombia, Guyana, Peru, Suriname, Venezuela

Vampyressa melissa 42 Colombia, French Guiana, Peru

Vampyrum spectrum <sup>42</sup>
Belize, Brazil, Colombia, Costa Rica,
Ecuador, French Guiana, Guatemala,
Guyana, Honduras, Jamaica, Mexico,
Nicaragua, Peru, Suriname, Trinidad
and Tobago, Venezuela

### Family NATALIDAE

Natalus lepidus 42 Bahamas, Cuba

#### Family VESPERTILIONIDAE

Chalinolobus beatrix 42 Congo, Côte d'Ivoire, Guinea-Bissau?, Kenya

Chalinolobus egeria 42 Cameroon, Uganda

Chalinolobus gleni 42 Cameroon, Uganda

Chalinolobus picatus 42
Australia

Chalinolobus poensis 42 Côte d'Ivoire, Equatorial Guinea, Gambia, Ghana?, Nigeria, Senegal, Sierra Leone, Zaire

Chalinolobus tuberculatus 42 New Zealand

Eptesicus bobrinskoi 42 Iran?, Kazakhstan, Turkmenistan, Uzbekistan

Eptesicus brunneus 42 Cameroon, Equatorial Guinea (Bioko), Ghana, Liberia, Nigeria, Sierra Leone, Zaire

Eptesicus caurinus 42 Australia

Eptesicus douglasorum 42 Australia

Eptesicus floweri 42 Mali, Sudan

Eptesicus guineensis 42 Ethiopia, Ghana, Guinea, Senegal, Sierra Leone, Zaire

Eptesicus pachyotis 42 India, Myanmar, Thailand

Eudiscopus denticulus 42
Laos, Myanmar

Glischropus javanus 42 Javan Thick-thumbed Bat Indonesia

Harpiocephalus mordax 42 Malaysia, Myanmar, Thailand

Histiotus macrotus 42 Argentina, Bolivia, Chile, Peru

Histiotus velatus 42 Brazil, Paraguay

Ia io 42

China, India, Laos, Thailand, Viet Nam

Kerivoula cuprosa 42 Cameroon, Kenya, Zaire

Kerivoula intermedia 42 Malaysia

Kerivoula minuta 42 Malaysia, Thailand

Kerivoula smithi 42 Cameroon, Côte d'Ivoire, Kenya, Liberia, Nigeria, Zaire

Laephotis angolensis 42 Angola, Zaire

Laephotis botswanae 42
Botswana, Malawi, South Africa,
Zaire, Zambia, Zimbabwe

Laephotis wintoni 42 Ethiopia, Kenya, South Africa

Lasiurus egregius 42 Brazil, French Guiana, Panama Miniopterus fraterculus 42 Angola, Madagascar, Malawi, Mozambique, South Africa, Zambia

Miniopterus minor 42 Comoros, Congo, Kenya, Madagascar, São Tomé & Príncipe, Tanzania, Zaire

Miniopterus schreibersi 42 Afghanistan, Albania, Algeria, Angola, Australia, Austria, Azerbaijan, Bosnia and Herzegovina, Botswana, Bulgaria, Cameroon, Central African Republic, China, Croatia, Ethiopia, France, Gambia?, Germany, Ghana, Gibraltar, Greece, Guinea, Hong Kong, Hungary, India, Indonesia, Iran, Iraq, Israel, Italy, Japan, Jordan, Kenya, Lebanon, Macedonia, Madagascar, Malawi, Malaysia, Malta, Morocco, Mozambique, Myanmar, Namibia, Nepal, Papua New Guinea, Philippines, Portugal, Romania, Rwanda?, Saudi Arabia, Sierra Leone, Slovakia, Slovenia, Solomon Islands, Somalia?, South Africa, Spain, Sri Lanka, Sudan, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, Uzbekistan, Viet Nam, Yemen, Yugoslavia, Zaire, Zambia, Zimbabwe

Murina aenea 42 Malaysia

Murina aurata 42 China, Myanmar, Nepal

Murina huttoni 42 China, India, Malaysia, Thailand, Viet Nam

Murina rozendaali 42 Malaysia

Murina silvatica 42 Japan

Myotis annectans 42 India, Indonesia, Myanmar, Thailand

Myotis bombinus 42 China, Japan, Russia

Myotis chiloensis 42 Chile

Myotis fortidens 42 Guatemala, Mexico

Myotis frater 42 China, Japan, North Korea, Russia, South Korea

Myotis goudoti 42 Comoros, Madagascar

Myotis hosonoi 42 Japan Myotis macrodactylus 42 Japan, Russia

Myotis macrotarsus 42 Malaysia, Philippines

Myotis martiniquensis 42 Barbados, Martinique

Myotis montivagus 42 China, India, Malaysia, Myanmar, Thailand

Myotis myotis 42

Greater Mouse-eared Bat Albania, Austria, Belarus, Belgium, Bulgaria, Cyprus, Czech Republic, France, Germany, Greece, Hungary, Israel, Italy, Jordan, Lebanon, Liechtenstein, Luxembourg, Malta, Netherlands, Poland, Portugal (Azores), Romania, Slovakia, Slovenia, Spain, Switzerland, Syria, Turkey, Ukraine, United Kingdom (ex?), Yugoslavia

Myotis nesopolus 42 Colombia, Venezuela

Myotis pequinius 42 China

Myotis ricketti 42 China

Myotis ridleyi 42 Indonesia, Malaysia

Myotis rosseti 42 Cambodia, Thailand

Nyctalus aviator 42 China, Japan, North Korea, South Korea

Nyctalus lasiopterus 42
Bosnia and Herzegovina, Bulgaria,
Croatia, France, Greece, Hungary,
Iran, Italy, Kazakhstan, Libya,
Macedonia, Moldova, Morocco,
Portugal, Romania, Slovakia,
Slovenia, Spain, Switzerland,
Turkey, Ukraine, Yugoslavia

Nyctalus leisleri 42

Afghanistan, Algeria, Armenia?, Austria, Azerbaijan?, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czech Republic, France, Georgia?, Germany, Greece, Hungary, India, Iran, Ireland, Italy, Kazakhstan?, Latvia, Libya, Lithuania, Luxembourg, Macedonia, Moldova, Netherlands, Pakistan, Poland, Portugal (Madeira), Romania, Slovakia, Slovenia, Spain (Canary Is), Switzerland, Turkmenistan, Ukraine, United Kingdom, Uzbekistan?, Yugoslavia

Nyctalus montanus 42
Afghanistan, India, Nepal, Pakistan



Nycticeius rueppellii 42 Australia

Nyctophilus daedolus 42 Australia

Nyctophilus sherrini 42 Australia

Nyctophilus walkeri 42 Australia

Pipistrellus ariel 42 Egypt, Sudan

Pipistrellus bodenheimeri 42 Israel, Oman, Yemen

Pipistrellus cadornae 42 India, Myanmar, Thailand

Pipistrellus kitcheneri 42 Indonesia

Pipistrellus macrotis 42 Brunei, Indonesia, Malaysia

Pipistrellus mordax 42 Indonesia, Philippines?

Pipistrellus musciculus 42 Cameroon, Gabon, Zaire

Pipistrellus papuanus 42 Indonesia, Papua New Guinea

Pipistrellus paterculus 42 China, India, Myanmar, Thailand

Pipistrellus pulveratus 42 China, Hong Kong, Thailand

Pipistrellus wattsi 42 Papua New Guinea

Rhogeessa alleni 42 Mexico

Rhogeessa genowaysi 42 Mexico

Rhogeessa gracilis 42 Mexico

Rhogeessa minutilla 42 Colombia, Venezuela

Rhogeessa mira 42 Mexico

Rhogeessa parvula 42 Mexico

Scotoecus albofuscus 42
Equatorial Guinea, Gambia, Ghana,
Kenya, Malawi, Mozambique,
Nigeria, Senegal, Sierra Leone,
Sudan

Scotomanes ornatus 42 China, India, Myanmar, Thailand, Viet Nam

Scotophilus nigrita 42 Ghana, Kenya, Malawi, Mozambique, Nigeria, Senegal, Sudan, Togo, Zaire, Zimbabwe

Scotophilus robustus 42 Madagascar Family MOLOSSIDAE

Chaerephon bregullae 42 Fiji, Vanuatu

Chaerephon chapini 42
Angola, Botswana, Ethiopia,
Namibia, Uganda, Zaire, Zambia,
Zimbabwe

Chaerephon johorensis 42 Indonesia, Malaysia

Chaerephon solomonis 42 Solomon Islands

Cheiromeles parvidens 42 Indonesia, Philippines

Cheiromeles torquatus 42 Indonesia, Malaysia, Philippines

Eumops underwoodi 42 Belize, El Salvador, Honduras, Nicaragua, USA

Molossops abrasus 42 Argentina, Bolivia, Brazil, Guyana, Paraguay, Peru, Suriname, Venezuela

Molossops mattogrossensis 42 Brazil, Guyana, Venezuela

Molossus aztecus 42 Guatemala, Honduras, Mexico, Nicaragua

Molossus coibensis 42
Brazil, Costa Rica, El Salvador,
Mexico, Panama, Peru, Venezuela

Mops congicus 42 Cameroon, Gambia?, Ghana, Nigeria, Uganda, Zaire

Mops demonstrator 42 Burkina Faso, Sudan, Uganda, Zaire

Mops petersoni 42 Cameroon, Ghana, Sierra Leone?

Mops sarasinorum 42 Indonesia, Philippines

Mops trevori 42 Uganda, Zaire

Tadarida australis 42 Australia, Indonesia, Papua New Guinea

Tadarida brasiliensis 42
Antigua and Barbuda, Argentina,
Bahamas, Belize, Bolivia, Brazil,
Cayman Islands, Chile, Colombia,
Costa Rica, Cuba, Dominica,
Dominican Republic, Ecuador,
El Salvador, Guadeloupe,
Guatemala, Haiti, Honduras,
Jamaica, Martinique, Mexico,
Montserrat, Netherlands Antilles,
Nicaragua, Panama, Paraguay, Peru,
Puerto Rico, St Kitts and Nevis, St
Lucia, Trinidad and Tobago, Turks
and Caicos Islands, USA, Uruguay,
Venezuela

Tadarida espiritosantensis 42 Brazil

Tadarida fulminans 42 Kenya, Madagascar, Malawi, Rwanda, South Africa, Tanzania, Zaire, Zambia, Zimbabwe

Tadarida ventralis 42 Ethiopia, Kenya, Malawi, Mozambique, South Africa, Sudan, Tanzania, Zaire

Order PRIMATES

Family CHEIROGALEIDAE

Phaner furcifer 15 Fork-marked Lemur Madagascar

Family LORIDAE

Arctocebus aureus 143
Golden Potto
Cameroon, Central African
Republic?, Congo, Equatorial
Guinea, Gabon, Zaire?

Arctocebus calabarensis 143 Angwantibo Cameroon, Nigeria

Family GALAGONIDAE

Euoticus elegantulus 143
Western Needle-clawed Galago
Angola?, Cameroon, Central African
Republic, Congo, Equatorial Guinea,
Gabon, Zaire

Euoticus pallidus 143 Northern Needle-clawed Cameroon, Equatorial Guinea, Nigeria

Galago alleni 143
Allen's Galago
Angola?, Cameroon, Central African
Republic, Congo, Equatorial Guinea,
Gabon, Nigeria

Galago gallarum <sup>143</sup> Somali Galago Ethiopia?, Kenya, Somalia

Galago matschiei 143 Lesser Needle-clawed Galago Burundi?, Rwanda?, Uganda, Zaire

Galago zanzibaricus <sup>143</sup> Zanzibar Galago Kenya, Malawi, Mozambique, Somalia, Tanzania, Zimbabwe

Otolemur garnettii 143 Small-eared Greater Galago Kenya, Somalia, Tanzania

# Family CERCOPITHECIDAE

Allenopithecus nigroviridis 143 Allen's Swamp Monkey Cameroon, Congo, Zaire

Cercacebus atys <sup>143</sup>
Sooty Mangabey
Côte d'Ivoire, Ghana, Guinea,
Guinea-Bissau, Liberia, Senegal,
Sierra Leone

Cercocebus galeritus 143
Crested Mangabey
Cameroon, Central African Republic,
Congo, Equatorial Guinea, Gabon,
Kenya, Tanzania, Zaire

Cercocebus torquatus 143
Red-capped Mangabey
Cameroon, Congo, Côte d'Ivoire,
Equatorial Guinea, Gabon, Ghana,
Guinea, Liberia, Nigeria, Senegal,
Sierra Leone

Cercopithecus hamlyni 143 Owl-faced Monkey Rwanda, Uganda?, Zaire

Cercopithecus lhoesti 143 L'Hoest's Monkey Burundi, Rwanda, Uganda, Zaire

Colobus polykomos 143
Western Black-and-white Colobus
Côte d'Ivoire, Gambia, Guinea,
Guinea-Bissau, Liberia, Senegal?,
Sierra Leone

Lophocebus aterrimus 143 Black Mangabey Angola, Zaire

Macaca fascicularis 143
Crab-eating Macaque
Brunei?, Cambodia, India (Andaman & Nicobar Is), Indonesia, Laos,
Malaysia, Myanmar, Philippines,
Thailand. Viet Nam

Macaca hecki 143 Heck's Macaque Indonesia

Macaca mulatta 143 Rhesns Macaque Afghanistan, Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal, Pakistan, USA [int], Viet Nam

Macaca sinica 143 Toque Macaque Sri Lanka

Macaca tonkeana 143 Tonkean Macaque Indonesia

Mandrillus sphinx 143
Mandrill
Cameroon, Congo, Equatorial
Guinea, Gabon

Papio hamadryas 143 Hamadryas Baboon Djibouti, Egypt (ex), Eritrea, Ethiopia, Saudi Arabia, Somalia, Sudan, Yemen

Papio papio 143
Guinea Baboon
Gambia, Guinea, Guinea-Bissau?,
Mali, Mauritania, Senegal, Sierra
Leone

Presbytis femoralis 143 Indonesia, Malaysia, Thailand

Presbytis thomasi 143 Indonesia Procolobus badius 143

Red Colobus

Burundi, Cameroon, Central African
Republic, Congo, Côte d'Ivoire,
Equatorial Guinea, Gambia, Ghana,
Guinea, Guinea-Bissau, Kenya,
Liberia, Nigeria, Senegal, Sierra
Leone, Tanzania, Uganda, Zaire

Procolabus verus 143
Olive Colobus
Benin?, Côte d'Ivoire, Ghana,
Guinea, Liberia, Nigeria, Sierra
Leone, Togo (ex?)

Semnopithecus entellus 143 Bangladesh, Bhutan, China, India, Nepal, Pakistan, Sri Lanka

Theropithecus gelada 143 Gelada Baboon Ethiopia

Trachypithecus cristatus 143
Brunei?, Cambodia, India, Indonesia,
Laos, Malaysia, Myanmar,
Singapore?, Thailand, Viet Nam

### Family HYLOBATIDAE

Hylobates agilis 143 Indonesia, Malaysia, Thailand

Hylobates lar 143 China, Indonesia, Malaysia, Myanmar, Thailand

Hylobates muelleri 143 Brunei, Indonesia, Malaysia

Hylobates syndactylus 143 Indonesia, Malaysia

#### Order CARNIVORA

Family CANIDAE

Crysocyon brachyurus 36 Maned Wolf Argentina, Bolivia, Brazil, Paraguay, Peru, Uruguay?

### Family FELIDAE

Catopuma temmincki 40 Asiatic Golden Cat Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, Viet Nam

Leopardus tigrinus 40
Little Spotted Cat
Argentina, Bolivia?, Brazil,
Colombia, Costa Rica, Ecuador,
French Guiana, Guyana, Nicaragua?,
Paraguay?, Suriname, Venezuela

Panthera onca 40

Jaguar
Argentina, Belize, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
French Guiana, Guatemala, Guyana,
Honduras, Mexico, Nicaragua,
Panama, Paraguay, Peru, Suriname,
Venezuela

Prionailurus viverrinus 40
Fishing Cat
Bangladesh, Bhutan, Brunei,
Cambodia, China, India, Indonesia,
Laos, Malaysia, Myanmar, Nepal,
Pakistan (ex?), Sri Lanka, Thailand,
Viet Nam

# Family MUSTELIDAE

Aonyx cinerea 127
Oriental Small-clawed Otter
Bangladesh, Bhutan, Brunei,
Cambodia, China, India, Indonesia,
Laos, Malaysia, Myanmar, Nepal,
Philippines, Singapore, Thailand,
Viet Nam

Aonyx congica 127
Burundi?, Cameroon, Central
African Republic, Congo, Gabon,
Niger?, Rwanda, Uganda, Zaire

### Family PHOCIDAE

Phoca sibirica 153 Baikal Seal Russia [L. Baikal]

# Family PROCYONIDAE

Bassaricyon beddardi 117 Guyana, Venezuela?

Bassaricyon gabbii 117 Colombia, Costa Rica, Ecuador, Nicaragua, Panama

Bassariscus sumichrasti 117
Belize, Costa Rica, El Salvador,
Guatemala, Honduras?, Mexico,
Nicaragua, Panama



#### Order CETACEA

# Family BALAENOPTERIDAE

Balaenoptera acutorostrata 41 Minke Whale

[Arctic Sea, Atlantic (eastern central, northeast, northwest, western central), Mediterranean and Black

### Order PERISSODACTYLA

# Family TAPIRIDAE

Tapirus terrestris 171

Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Venezuela

### Order ARTIODACTYLA

### Family SUIDAE

Sus philippensis 135 Philippine Warty Pig Philippines

### Family TRAGULIDAE

Hyemoschus aquaticus 59

Cameroon, Central African Republic, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea?, Liberia, Nigeria, Sierra Leone, Uganda, Zaire

# Family MOSCHIDAE

Moschus berezovskii 59

Forest Musk Deer

China, Myanmar, Viet Nam

Moschus chrysogaster 59

Afghanistan, China, India, Nepal, Pakistan

Moschus fuscus 59

Black Musk Deer

Bhutan, China, India, Myanmar, Nepal

#### Family CERVIDAE

Hydropotes inermis 59

Chinese Water Deer

China

Mazama rufina 59

Little Red Brocket Deer Ecuador, Venezuela

### Ozotoceros bezoarticus 59

Pampas Deer

Argentina, Bolivia, Brazil, Paraguay, Uruguay

Pudu mephistophiles 59

Northern Pudu

Colombia, Ecuador, Peru

### Family BOVIDAE

Capra pyrenaica 37

Spanish Ibex

Portugal (ex), Spain

# Cephalophus callipygus 9

Peters' Duiker

Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon

# Cephalophus dorsalis 9

Bay Duiker

Angola, Benin?, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Sierra Leone, Togo, Uganda (ex), Zaire

# Cephalophus leucogaster 9

White-bellied Duiker

Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon, Uganda (ex), Zaire

### Cephalophus maxwellii 9 Maxwell's Duiker

Benin, Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria,

# Cephalophus niger 9

Black Duiker

Benin?, Côte d'Ivoire, Ghana, Guinea, Liberia, Nigeria, Sierra Leone, Togo

Senegal, Sierra Leone, Togo

# Cephalophus nigrifrons 9

Black-fronted Duiker

Angola, Burundi, Cameroon, Central African Republic, Congo, Equatorial Guinea?, Gabon, Kenya, Rwanda, Uganda, Zaire

# Cephalophus ogilbyi 9

Ogilby's Duiker

Cameroon, Congo?, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea?, Liberia, Nigeria, Sierra Leone

# Cephalophus silvicultor 9

Yellow-backed Duiker

Angola, Benin, Burkina Faso, Burundi (ex?), Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Equatorial Guinea, Guinea-Bissau, Kenya, Liberia, Nigeria, Rwanda (ex?), Senegal, Sierra Leone, Sudan, Togo, Uganda, Zaire, Zambia

### Cephalophus weynsi?

Weyn's Duiker

Burundi, Kenya, Rwanda, Sudan, Tanzania, Uganda, Zaire

### Gazella dorcas 9

Dorcas Gazelle

Algeria, Burkina Faso, Chad, Djibouti, Egypt, Eritrea, Ethiopia, Israel, Libya, Mali, Mauritania, Morocco, Niger, Nigeria?, Senegal (ex), Somalia, Sudan, Tunisia, Western Sahara

# Gazella subgutturosa 9

Goitred Gazelle

Afghanistan, Armenia (ex), Azerbaijan, Bahrain, China, Georgia(ex), Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Mongolia, Oman, Pakistan, Saudi Arabia, Syria (ex), Tajikistan, Turkey, United Arab Emirates, Uzbekistan, Yemen

# Kobus megaceros 9

Nile Lechwe

Ethiopia, Sudan

# Naemorhedus goral 37

Himalayan Goral

Bhutan, India, Nepal, Pakistan

# Neotragus batesi 9

Bates' Pygmy Antelope

Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon, Nigeria, Uganda, Zaire

### Neotragus pygmaeus 9

Royal Antelope

Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone

# Okapia johnstoni 9

Okapi

Uganda?, Zaire

Procapra gutturosa 9 Mongolian Gazelle China, Mongolia, Russia

#### Procapra picticaudata 9

Tibetan Gazelle

Bhutan?, China, India

# Pseudois nayaur 37

Blue Sheep

China, India, Pakistan, Tajikistan

# Taurotragus derbianus 9

Giant Eland

Cameroon, Central African Republic, Chad (ex?), Côte d'Ivoire (ex), Gambia (ex), Ghana (ex), Guinea-Bissau, Mali (ex), Nigeria (ex), Senegal, Sudan, Togo (ex), Uganda (ex?), Zaire

# Tragelaphus eurycerus 9

Bongo

Benin (ex?), Cameroon, Central African Republic, Congo, Côte d'Ivoire, Gabon, Ghana, Guinea, Kenya, Liberia, Sierra Leone, Sudan, Togo (ex?), Uganda (ex), Zaire

### Tragelaphus spekii 9

Sitatunga

Angola, Benin, Botswana, Burundi, Carneroon, Central African Republic, Chad, Congo, Côte d'Ivoire?, Equatorial Guinea, Gabon, Gambia, Ghana (ex?), Guinea, Guinea-Bissau, Kenya, Mozambique, Namibia, Niger (ex), Nigeria, Rwanda, Senegal, Sierra Leone (ex?), Sudan, Tanzania, Togo (ex?), Uganda, Zaire, Zambia, Zimbabwe

### Order PHOLIDOTA

### Family MANIDAE

Manis crassicaudata 130 Indian Pangolin Bangladesh, China, India, Pakistan, Sri Lanka

Manis javanica <sup>130</sup>
Malayan Pangolin
Bangladesh?, Brunei, Cambodia,
China?, Indonesia, Laos, Malaysia,
Myanmar, Philippines, Singapore
(ex?), Thailand, Viet Nam

Manis pentadactyla 130 Chinese Pangolin Bangladesh?, Cambodia, China, Hong Kong, India, Laos, Myanmar, Nepal, Taiwan, Thailand, Viet Nam

Manis temminckii 130
Temminck's Ground Pangolin
Angola, Botswana, Central African
Republic, Chad, Ethiopia, Kenya,
Malawi, Mozambique, Namibia,
Rwanda, Somalia, South Africa,
Sudan, Tanzania, Uganda, Zaire,

#### Order RODENTIA

Zambia, Zimbabwe

### Family SCIURIDAE

Aeretes melanopterus 15 China

Belomys pearsonii 15
Bhutan, China, India, Laos,
Myanmar, Nepal, Taiwan, Thailand,
Viet Nam

Eoglaucomys fimbriatus 15 India, Pakistan

Epixerus ebii 15 Côte d'Ivoire, Ghana, Liberia, Sierra Leone

Epixerus wilsoni 15 Cameroon, Equatorial Guinea, Gabon Funisciurus isabella 15

Cameroon, Central African Republic, Congo

Hylopetes baberi 15 Afghanistan Hylopetes bartelsi 15 Indonesia

Hylopetes nigripes 15 Philippines

Lariscus niobe 15 Indonesia

Lariscus obscurus 15 Indonesia

Marmota caudata 15 Armenia, Azerbaijan, China, India, Kyrgyzstan, Pakistan, Tajikistan

Paraxerus alexandri 15 Uganda, Zaire

Petaurista magnificus 15 Bhutan, China, India, Nepal

Petaurista nobilis 15 Bhutan, India, Nepal

Petinomys lugens 15 Indonesia

Prosciurillus weberi 15 Indonesia

Pteromys volans 8
Russian Flying Squirrel
China, Finland, Japan, Mongolia,
North Korea, Russia, South Korea

Pteromyscus pulverulentus 15 Brunei, Indonesia, Malaysia, Thailand

Sciurus anomalus 8 Persian Squirrel Armenia, Azerbaijan, Georgia, Greece, Iran, Iraq, Israel, Lebanon, Syria, Turkey

Sciurus arizonensis 15 Mexico USA

Sciurus richmondi 15 Nicaragua

Sciurus sanborni 15

Sciurus vulgaris 8 Red Squirrel

Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Macedonia, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia

Spermophilus madrensis 15 Mexico

Spermophilus major 15 Russia

Spermophilus perotensis 15 Mexico Sundasciurus brookei 15 Indonesia, Malaysia

Sundasciurus moellendorffi 86 Philippines

Sundasciurus steerii 86 Philippines

Syntheosciurus brochus 15 Mountain Squirrel Costa Rica, Panama

# Family CASTORIDAE

Castor fiber 75
Eurasian Beaver
Austria, Belarus, China, Czech
Republic, Estonia, Finland, France,
Germany, Hungary, Latvia,
Lithuania, Moldova?, Mongolia,
Netherlands, Norway, Poland,
Russia, Slovakia, Sweden,
Switzerland, Ukraine

# Family **GEOMYIDAE**

Orthogeomys cherriei 15 Costa Rica

Pappogeomys fumosus 15 Mexico

Pappogeomys tylorhinus 15 Mexico

Pappogeomys zinseri 15 Mexico

Thomomys umbrinus 15 Mexico, USA

# Family HETEROMYIDAE

Dipodomys nitratoides 82 San Joaquin Kangaroo Rat USA

Dipodomys phillipsii 15 Mexico

Heteromys goldmani 15 Mexico

Heteromys oresterus 15 Costa Rica

Liomys adspersus 15 Panama

Liomys spectabilis 15 Mexico

Perognathus alticola 82
White-eared Pocket Mouse
USA

Perognathus amplus 15 Mexico, USA

### Family DIPODIDAE

Allactaga bullata 15 China, Mongolia



Allactaga euphratica 15
Afghanistan, Iran, Iraq, Jordan,
Kuwait, Saudi Arabia, Syria, Turkey

Jaculus orientalis 15 Algeria, Egypt, Israel, Libya, Morocco, Saudi Arabia, Tunisia

Pygeretmus shitkovi 15 Kazakhstan [L. Balkhash]

Salpingotus heptneri 15 Kazakhstan, Russia, Uzbekistan

Salpingotus kozlovi 15 China, Mongolia

Sicista betulina <sup>8</sup>
Northern Birch Mouse
Austria, Azerbaijan, China, Czech
Republic, Denmark, Finland,
Georgia, Germany, Hungary,
Kazakhstan, Mongolia, Norway,
Poland, Romania, Russia, Slovakia,
Sweden, Ukraine

Sicista subtilis 8
Southern Birch Mouse
Austria, Bosnia and Herzegovina,
Bulgaria, China, Croatia, Czech
Republic, Hungary, Kazakhstan,
Macedonia, Moldova, Romania,
Russia, Slovakia, Slovenia, Ukraine,
Yugoslavia

### Family MURIDAE

Acomys nesiotes 15 Cyprus

Aethomys stannarius 169 Cameroon, Nigeria

Akodon sanctipaulensis 15 Brazil

Alticola albicauda 15 India, Pakistan

Alticola roylei 15 China, India

Apodemus semotus 15 Taiwan

Arvicola sapidus 8 Southern Water Vole France, Portugal, Spain

Beamys major 15
Greater Hamster-rat
Malawi, Tanzania, Zambia

Bibimys torresi 48 Argentina

Blanfordimys bucharicus 15 Afghanistan?, Tajikistan

Blarinomys breviceps 15 Brazil

Brachyuromys betsileoensis 15 Madagascar Brachyuromys ramirohitra 15 Madagascar

Bunomys fratrorum 15 Indonesia

Bunomys heinrichi 15 Indonesia

Calomyscus mystax 15 Afghanistan, Iran, Turkmenistan

Calomyscus tsolovi 15 Syria

Calomyscus urartensis 15 Azerbaijan, Iran

Celaenomys silaceus 86 Philippines

Chibchanomys trichotis 48 Colombia, Peru, Venezuela

Chionomys gud 15 Georgia, Russia, Turkey

Chionomys nivalis s Snow Vole Armenia, Australia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Georgia, Greece, Israel, Italy, Lebanon, Macedonia, Poland, Romania, Slovakia, Slovenia, Spain, Switzerland, Syria, Turkey, Ukraine, Yugoslavia

Chionomys roberti 15 Georgia, Russia, Turkey

Chiropodomys muroides 15 Malaysia

Clethrionomys sikotanensis 173 Japan, Russia

Cricetulus migratorius 8
Grey Hamster
Afghanistan, Bulgaria, China,
Greece, Iran, Iraq, Israel, Jordan,
Kazakhstan, Lebanon, Moldova,
Mongolia, Pakistan, Romania,
Russia, Turkey, Ukraine

Dasymys foxi 15 Nigeria

Dendromus kahuziensis 15 Zaire

Dendromus lovati 15 Ethiopia

Dendroprionomys rousseloti 15 Congo

Dinaromys bogdanovi 8

Balkan Snow Vole

Bosnia and Herzegovina, Croatia,
Macedonia, Slovenia, Yugoslavia

Diomys crumpi 15 India, Nepal

Diplothrix legatus 15 Ryukyu Long-tailed Giant Rat Japan (Nansei-shoto) Eliurus webbi 15 Madagascar

Gerbillus nancillus 15 Sudan

Gerbillus poecilops 85 Saudi Arabia, Yemen

Gerbillus riggenbachi 15 Western Sahara

Grammomys minnae 15 Ethiopia

Habromys lepturus 15 Mexico

Hapalomys delacouri 15 China, Viet Nam

Hapalomys longicaudatus 15 Myanmar

Hodomys alleni 15 Mexico

Hybomys basilii 15 Equatorial Guinea (Bioko)

Hydromys habbema 15 Indonesia, Papua New Guinea

Hydromys hussoni 15 Indonesia, Papua New Guinea

Hydromys shawmayeri 15 Indonesia, Papua New Guinea

Ichthyomys hydrobates 48 Colombia, Ecuador, Venezuela

Isthmomys pirrensis 15 Panama

Juscelinomys candango 15 Brazil

Kadarsanomys sodyi 15 Indonesia

Lasiopodomys fuscus 15 China

Leggadina forresti 15 Australia

Leggadina lakedownensis 15 Lakeland Downs Mouse Australia

Lemniscomys roseveari 169 Zambia

Lenoxus apicalis 48 Bolivia, Peru

Lophuromys medicaudatus 169 Rwanda, Zaire

Lophuromys melanonyx 15 Ethiopia

Lophuromys rahmi 15 Rwanda, Zaire

Malacomys lukolelae 169 Zaire

Mallomys istapantap 15 Indonesia, Papua New Guinea Mastomys verheyeni 15 Cameroon, Nigeria

Maxomys hylomyoides 15 Indonesia

Maxomys pagensis 15 Indonesia

Maxomys panglima 15 Philippines

Megadontomys cryophilus 15 Mexico

Melomys aerosus 15 Indonesia

Melomys bougainville 15 Solomon Islands

Melomys fraterculus 15 Indonesia

Melomys obiensis 15 Indonesia

Mesembriomys gouldii 15 Australia

Microdillus peeli 15 Somalia

Microhydromys richardsoni 15 Indonesia, Papua New Guinea

Micromys minutus 8 Harvest Mouse

Armenia?, Austria, Azerbaijan?, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, India, Italy, Japan, Latvia, Lithuania, Macedonia, Mongolia, Netherlands, North Korea, Poland, Romania, Russia, Slovenia, South Korea, Spain, Switzerland, Taiwan, Turkey, Ukraine, United Kingdom, Yugoslavia

Microtus cabrerae 8 Cabrera's Vole

France, Portugal, Spain

Microtus feltini 8
Albania, Bosnia and Herzegovina,
Croatia, Greece, Macedonia,
Slovenia, Yugoslavia

Microtus guentheri 8
Bosnia and Herzegovina, Bulgaria,
Croatia, Greece, Macedonia,
Slovenia, Turkey, Yugoslavia

Microtus nasarovi 15 Russia

Microtus oaxacensis 15
Mexico

Microtus oeconomus 8 Root Vole

Austria, Belarus?, Canada, Czech Republic, Finland, Germany, Hungary, Kazakhstan, Mongolia, Netherlands, Norway, Poland, Russia, Slovakia, Sweden, USA, Ukraine

Microtus sachalinensis 15 Russia

Microtus tatricus 8 Tatra Vole

Poland, Romania, Slovakia, Ukraine

Microtus thomasi 8

Albania, Bosnia and Herzegovina, Croatia, Greece, Macedonia, Slovenia, Yugoslavia

Mus mayori 15 Sri Lanka

Mus spicilegus 8 Steppe Mouse

Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Macedonia, Romania, Slovenia, Ukraine, Yugoslavia

Mus vulcani 15 Indonesia

Myomys albipes 15
Ethiopia

Myopus schisticolor 8
China, Finland, Mongolia, Norway, Russia, Sweden

Myospalax epsilanus 15 China, Russia

Myospalax rothschildi 15 China

Myospalax smithii 15 China

Neacomys pictus 15 Panama

Neotoma magister 82 Allegheny Woodrat USA

Neotoma palatina 15 Mexico

Nesokia bunnii 15 Iraq

Niviventer coxingi 15
Taiwan

Niviventer culturatus 15

Niviventer hinpoon 15
Thailand

Notomys aquilo 15 Northern Hopping-mouse Australia

Notomys cervinus 15
Australia

Oligoryzomys vegetus 15 Panama

Oryzomys dimidiatus 15 Nicaragua Oryzomys levipes 15 Bolivia, Peru

Oryzomys oniscus 15 Brazil

Otomys anchietae 15 Angola, Kenya, Malawi, Tanzania

Otomys denti 169

Malawi, Tanzania, Uganda, Zambia

Otomys saundersiae 15 South Africa

Otomys sloggetti 15 South Africa

Otomys typus 15

Ethiopia, Kenya, Malawi, Tanzania, Uganda, Zambia

Peromyscus grandis 15 Guatemala

Peromyscus guardia 15 Mexico

Peromyscus simulus 15 Mexico

Peromyscus winkelmanni 15 Mexico

Petromyscus monticularis 15 South Africa

Phloeomys pallidus \*6
Philippines

Phyllotis bonaeriensis 48 Argentina

Pithecheir melanurus 15 Indonesia

Podoxymys roraimae 15 Guyana

Praomys mutoni 169 Zaire

Prionomys batesi 15
Dollman's Tree Mouse
Cameroon, Central African Republic

Proedromys bedfordi 15 China

Pseudomys delicatulus 15 Australia

Pseudomys desertor 15
Australia

Pseudomys johnsoni 15 Australia

Pseudomys nanus 15 Australia

Rattus foramineus 15 Indonesia

Rattus giluwensis 15 Giluwe Rat Papua New Guinea

Rattus hainaldi 15 Indonesia



Rattus jobiensis 15 Indonesia

Rattus koopmani 15 Indonesia

Rattus sordidus 15 Australia

Rattus tunneyi 15 Australia

Reithrodontomys hirsutus 15 Mexico

Reithrodontomys microdon 15 Guatemala, Mexico

Reithrodontomys paradoxus 15 Costa Rica, Nicaragua

Reithrodontomys zacatecae 15 Mexico

Rheomys mexicanus 15
Mexico

Rhipidomys caucensis 15

Colombia

Rhipidomys ochrogaster 48

Peru Peru

Solomys salebrosus 15
Papua New Guinea, Solomon Islands

Srilankamys oriensis 15 Sri Lanka

Steatomys cuppedius 15
Burkina Faso, Mali, Niger, Nigeria,
Senegal

Stenocephalemys albocaudata 169 Ethiopia

Stenocephalemys griseicauda 169 Ethiopia

Tachyoryctes daemon 15 Rwanda, Tanzania

Tachyoryctes spalacinus 15 Kenya

Taeromys punicans 15
Indonesia

Thallomys shortridgei 169
South Africa

Thomasomys monochromos 15 Colombia

Thomasomys notatus 15
Peru

Tylomys fulviventer 15 Panama

Uromys anak 15 Papua New Guinea

Uromys hadrourus 15 Australia

Volemys clarkei 15 China

Xenomys nelsoni 15 Mexico Xenuromys barbatus 15

Rock-dwelling Rat Indonesia, Papua New Guinea

# Family ANOMALURIDAE

Anomalurus pelii 15

Côte d'Ivoire, Ghana, Liberia, Sierra Leone

Idiurus macrotis 15

Benin, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Gabon, Ghana, Guinea, Liberia, Nigeria, Sierra Leone, Togo, Zaire

Idiurus zenkeri 15

Cameroon, Central African Republic, Congo, Gabon, Uganda, Zaire

Zenkerella insignis 15

Flightless Scaly-tailed Squirrel Cameroon, Central African Republic, Gabon

# Family MYOXIDAE

Dryomys laniger 15
Turkey

Dryomys nitedula 8 Forest Dormouse

Afghanistan, Austria, Belarus, Bulgaria, China, Czech Republic, Germany, Greece, Hungary, Iran, Iraq, Israel, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Pakistan, Poland, Romania, Russia, Slovakia, Switzerland, Syria, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia

Eliomys melanurus 15

Algeria, Egypt, Iraq, Israel, Jordan, Lebanon, Libya, Morocco, Saudi Arabia, Syria, Tunisia, Turkey

Muscardinus avellanarius 173

Common Dormouse

Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Macedonia, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

Myoxus glis 8

Fat Dormouse

Armenia?, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia?, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Latvia, Lithuania, Macedonia, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Turkey, Turkmenistan, Ukraine, Yugoslavia

## Family BATHYERGIDAE

Bathyergus janetta 15 Namibia, South Africa

Cryptomys foxi 15 Nigeria

Cryptomys zechi 15 Ghana, Togo

Heliophobius argenteocinereus 15 Kenya, Mozambique, Tanzania, Zaire, Zambia, Zimbabwe

#### Family HYSTRICIDAE

Hystrix crassispinis 15 Brunei, Indonesia, Malaysia

Hystrix cristata 8

Crested Porcupine Algeria, Burkina Faso, Cameroon, Chad, Egypt, Ethiopia, Italy, Kenya,

Chad, Egypt, Ethiopia, Italy, Kenya, Libya, Mali, Mauritania, Morocco, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Sudan, Tanzania, Tunisia, Uganda, Western Sahara

#### Family CHINCHILLIDAE

Lagidium wolffsohni 48 Argentina, Chile

Family CAVIIDAE

Dolichotis patagonum 15 Argentina

Dolichotis salinicola 15 Argentina, Bolivia, Paraguay

#### Family DASYPROCTIDAE

Dasyprocta mexicana 15 Mexico

#### Family AGOUTIDAE

Agouti taczanowskii 15 Colombia, Ecuador, Peru, Venezuela

# Family CTENOMYIDAE

Ctenomys latro 15 Argentina

Ctenomys nattereri 15 Brazil

Ctenomys sociabilis 15 Argentina

#### Family ECHIMYIDAE

Carterodon sulcidens 48
Brazil

Diplomys caniceps 15 Colombia, Ecuador

Echimys blainvillei 15 Brazil

Echimys pictus 15 Brazil

Isothrix bistriata 15
Brazil, Colombia, Peru, Venezuela

Isothrix pagurus 15 Brazil

Olallamys albicauda 15 Colombia

Olallamys edax 48 Colombia, Venezuela

Proechimys albispinus 15 Brazil

Proechimys gorgonae 15 Colombia

#### Family CAPROMYIDAE

Mysateles melanurus 15
Bushy-tailed Hutia
Cuba

Mysateles meridionalis 15
Isla de la Juventud Tree Hutia
Cuba

# Order LAGOMORPHA

#### Family OCHOTONIDAE

Ochotona forresti 104
Forrest's Pika
Bhutan, China, India, Myanmar
Ochotona thomasi 104

Ochotona thomasi 10-Thomas' Pika

#### Family LEPORIDAE

Brachylagus idahoensis 104 Pygmy Rabbit USA

Lepus callotis 104
White-sided Jackrabbit
Mexico, USA

Lepus insularis 104
Black Jackrabbit
Mexico

Lepus yarkandensis 104 Yarkland Hare China

Sylvilagus cunicularius 104 Mexican Cottontail Mexico

Sylvilagus mansuetus 104 San Jose Brush Rabbit Mexico

#### Class AVES

#### Order RHEIFORMES

Family RHEIDAE

Rhea omericana 21

Greater Rhea
Argentina, Bolivia, Brazil, Paraguay,

Uruguay

\*\*Rhea pennata 21\*\*
Lesser Rhea
Argentina, Bolivia, Chile, Peru

#### Order CASUARIIFORMES

# Family CASUARIIDAE

Casuarius bennetti <sup>21</sup> Dwarf Cassowary Indonesia, Papua New Guinea

#### Order TINAMIFORMES

# Family TINAMIDAE

Crypturellus columbianus <sup>21</sup> Colombian Tinamou Argentina, Bolivia, Brazil, Paraguay, Pen

Crypturellus noctivagus 21 Yellow-legged Tinamou Brazil

Crypturellus transfasciatus 21 Pale-browed Tinamou Ecuador, Peru

Nothocercus nigrocapillus <sup>21</sup> Hooded Tinamou Bolivia, Peru

Tinamus solitarius 21 Solitary Tinamou Argentina, Brazil, Paraguay

#### Order SPHENISCIFORMES

# Family SPHENISCIDAE

Spheniscus demersus <sup>21</sup>
Jackass Penguin
Namibia, South Africa. \* Angola,
Mozambique

Spheniscus humboldti <sup>21</sup> Humboldt Penguin Chile, Peru

#### Order PODICIPEDIFORMES

#### Family PODICIPEDIDAE

Podiceps gallardoi 21 Hooded Grebe Argentina

#### Order PROCELLARIIFORMES

# Family DIOMEDEIDAE

Diomedea bulleri 21 Buller's Albatross New Zealand

Diomedea chrysostoma 21
Grey-headed Albatross
Australia, Falkland Islands, French
Southern and Antarctic Territories,
New Zealand, South Africa

Diomedea epomophora 21 Royal Albatross New Zealand

Diomedea irrorata 21 Waved Albatross Ecuador

Phoebetria fusca 21
Sooty Albatross
French Southern and Antarctic
Territories, South Africa, St Helena

# Family PROCELLARIIDAE

Macronectes halli 21 Northern Giant-petrel Australia, French Southern and Antarctic Territories, New Zealand, South Africa

Puffinus bulleri 21
Buller's Shearwater
New Zealand

#### Family HYDROBATIDAE

Oceanodroma homochroa 21 Ashy Storm-petrel Mexico, USA

Oceanodroma monorhis <sup>21</sup> Swinhoe's Storm-petrel Japan, South Korea, Taiwan. \* China

Oceanodroma tethys 21 Wedge-rumped Storm-petrel Ecuador, Peru

Oceanodroma tristrami <sup>21</sup>
Tristram's Storm-petrel
Japan (Kazan-retto), USA (Hawaiian

#### Order PELECANIFORMES

#### Family SULIDAE

Morus capensis <sup>21</sup>
Cape Gannet
Namibia, South Africa. \* Angola,
Cameroon, Congo, Equatorial
Guinea, Gabon, Mozambique,
Nigeria, São Tomé & Príncipe,
Tanzania, Zaire



#### Family

#### PHALACROCORACIDAE

Phalacrocorax coronatus 21

Crowned Cormorant Angola, Namibia, South Africa

Phalacrocorax gaimardi 21

Red-legged Cormorant Argentina, Chile, Peru

Phalacrocorax neglectus 21

Bank Cormorant

Namibia, South Africa

Phalacrocorax nigrogularis 21

Socotra Cormorant Yemen

1 cincii

Phalacrocorax pygmeus 21

Pygmy Cormorant

Albania, Azerbaijan, Bulgaria, Greece, Hungary, Iran, Iraq, Italy, Kazakhstan, Moldova, Romania, Russia, Tajikistan, Turkey, Turkmenistan, Uzbekistan, Yugoslavia. \* Afghanistan, Austria,

Georgia, Israel

# Family ANHINGIDAE

Anhinga melanogaster 21

Oriental Darter

Bangladesh, Brunei, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand (ex?), Viet Nam

#### Order CICONIIFORMES

#### Family ARDEIDAE

Agamia agami 21

Agami Heron Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador,

French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Suriname, Trinidad and

Tobago, Venezuela

Ardea sumatrana 21 Great-billed Heron

Australia, Brunei, India, Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand, Viet Nam

Ardeola idae 21

Madagascar Pond-heron
Madagascar, Seychelles. \* Burundi,
Company Kanya Malayi Buyanda

Comoros, Kenya, Malawi, Rwanda, Tanzania, Uganda, Zaire, Zimbabwe

Ixobrychus eurhythmus 21 Schrenck's Bittern

China, Japan, North Korea, Russia, South Korea. \* Brunei, China, Indonesia, Laos, Malaysia, Myanmar, Philippines, Taiwan, Thailand, Viet Nam

Tigrisoma fasciatum 21

Fasciated Tiger-heron
Bolivia, Brazil, Colombia,
Costa Rica, Ecuador, Panama, Peru,
Venezuela

Zebrilus undulatus 21

Zigzag Heron

Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela

Zonerodius heliosylus 21

Forest Bittern

Indonesia, Papua New Guinea

# Family BALAENICIPITIDAE

Balaeniceps rex 21

Shoebill

Burundi?, Central African Republic, Ethiopia, Malawi, Rwanda, Sudan, Tanzania, Uganda, Zaire, Zambia

#### Family CICONIIDAE

Anastomus oscitans 21

Asian Openbill

Bangladesh, Cambodia, India, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Viet Nam

Mycteria leucocephala 21

Painted Stork

Bangladesh, Cambodia, China, India, Laos, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Viet Nam

#### Family THRESKIORNITHIDAE

Lophotibis cristata 21

Madagascar Crested Ibis

Madagascar

Pseudibis papillosa 21

Red-naped Ibis

Bangladesh, India, Nepal, Pakistan

Threskiornis melanocephalus 21 Black-headed Ibis

Bangladesh, Cambodia, China, India, Indonesia, Japan (ex), Nepal, Pakistan, Sri Lanka, Taiwan, Viet Nam. \* China, Hong Kong, Indonesia, Japan, Lesotho, Malaysia,

Myanmar, Thailand

# Family PHOENICOPTERIDAE

Phoenicopterus minor 21

Lesser Flamingo

Botswana, Djibouti, Kenya, Mauritania, Namibia, South Africa, Zaire, Zambia. \* Angola, Burundi, Cameroon, Eritrea, Ethiopia, Gabon, Gambia, Guinea, Guinea-Bissau, India, Madagascar, Malawi, Mozambique, Pakistan, Senegal, Sierra Leone, Tanzania, Uganda, Yemen, Zimbabwe

#### Order ANSERIFORMES

#### Family ANHIMIDAE

Chauna chavaria 21

Northern Screamer Colombia, Venezuela

# Family ANATIDAE

Aix galericulata 21

Mandarin Duck

China, Japan, North Korea, Russia, South Korea. \* Austria [int], Belgium [int], Netherlands [int], Taiwan, United Kingdom [int]

Anas luzonica 21

Philippine Duck Philippines

Anas melleri 21

Meller's Duck

Madagascar, Mauritius [int]

Anas specularis 21

Spectacled Duck

Argentina, Chile

Chloephaga rubidiceps 21

Ruddy-headed Goose

Argentina, Chile, Falkland Islands

Cygnus buccinator 21

Trumpeter Swan Canada, USA

Heteronetta atricapilla 21

Black-headed Duck

Argentina, Bolivia, Brazil, Chile, Paraguay, Uruguay

Neochen jubata 21

Orinoco Goose

Argentina, Bolivia, Brazil,

Colombia, French Guiana, Guyana, Paraguay, Peru, Suriname, Venezuela

Tachyeres leucocephalus 21

Chubut Steamerduck

Argentina

#### Order FALCONIFORMES

# Family ACCIPITRIDAE

Accipiter butleri 21

Nicobar Sparrowhawk India

Accipiter collaris 21

Semicollared Hawk

Colombia, Ecuador, Peru, Venezuela

Accipiter henstii 21

Henst's Goshawk

Madagascar

Accipiter luteoschistaceus 21 Slaty-mantled Sparrowhawk Papua New Guinea

Accipiter madagascariensis 21 Madagascar Sparrowhawk Madagascar

Accipiter nanus 21 Small Sparrowhawk Indonesia

Accipiter poliogaster <sup>21</sup>
Grey-bellied Goshawk
Argentina, Bolivia, Brazil,
Colombia, Ecuador, Guyana,
Paraguay, Peru, Suriname, Venezuela

Accipiter princeps 21 New Britain Goshawk Papua New Guinea

Aegypius monachus 21 Cinereous Vulture

Afghanistan, Albania (ex?),
Armenia, Azerbaijan, Bulgaria?,
China, Cyprus?, Georgia, Greece,
Iran, Kazakhstan, Kyrgyzstan,
Mongolia, Pakistan, Portugal,
Russia, Spain (Balearic Is), Syria?,
Tajikistan, Turkey, Turkmenistan,
Uzbekistan, Yugoslavia. \*
Bangladesh?, Bhutan?, Egypt, Hong
Kong, India, Italy, Morocco,
Myanmar, Nepal, North Korea,
Oman, Saudi Arabia, South Korea,
Thailand

Aquila gurneyi 21 Gurney's Eagle Indonesia, Papua New Guinea

Aviceda jerdoni 21 Jerdon's Baza Brunei, China, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand

Butastur liventer 21 Rufous-winged Buzzard Cambodia, China, Indonesia, Laos, Myanmar, Thailand, Viet Nam

Buteo solitarius <sup>21</sup> Hawaiian Hawk USA (Hawaiian Is)

Buteo ventralis 21 Rufous-tailed Hawk Argentina, Chile

Circaetus fasciolatus <sup>21</sup>
Southern Banded Snake-eagle
Kenya, Mozambique, Somalia, South
Africa, Tanzania, Zimbabwe

Circus macrourus 21
Pallid Harrier
China, Moldova, Russia, Ukraine. \*
Afghanistan, Albania, Algeria,
Angola, Bangladesh, Benin,
Botswana, Burundi, Cameroon,

Central African Republic, Chad, Côte d'Ivoire, Cyprus, Djibouti, Egypt, Eritrea, Ethiopia, Gambia, Ghana, Greece, India, Iran, Iraq, Israel, Jordan, Kenya, Lebanon, Liberia, Libya, Malawi, Mali, Mauritania, Mozambique, Myanmar, Namibia, Nepal, Niger, Nigeria, Oman, Pakistan, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Somalia, South Africa, Sri Lanka, Sudan, Syria, Tanzania, Togo, Tunisia, Turkey, Uganda, Yemen, Zambia, Zimbabwe

Circus maillardi <sup>21</sup> Madagascar Harrier Comoros, Madagascar, Réunion

Circus maurus 21
Black Harrier
Lesotho, Namibia, South Africa

Gyps bengalensis 21 White-rumped Vulture Bangladesh, Cambodia, China, India, Laos, Malaysia, Myanmar, Nepal, Pakistan, Thailand, Viet Nam

Gyps indicus <sup>21</sup>
Long-billed Vulture
Bangladesh, Cambodia, India, Laos,
Malaysia, Myanmar, Nepal,
Thailand, Viet Nam

Haliaeetus albicilla 21 White-tailed Eagle Albania (ex?), Armer

Harpia harpyja 21

Albania (ex?), Armenia, Austria,
Azerbaijan, Belarus, Bulgaria, China,
Czech Republic, Denmark, Estonia,
Finland, Georgia, Germany, Greece,
Greenland, Hungary, Iceland, Iran,
Israel, Japan, Kazakhstan, Latvia,
Lithuania, Moldova, Mongolia,
Nepal, Norway, Poland, Romania,
Russia, Sweden, Turkey,
Turkmenistan, Ukraine, Yugoslavia.
\* Afghanistan, Faeroe Islands,
France, India, Israel, Japan, Nepal,
North Korea, Pakistan, South Korea,
Taiwan, Tajikistan, USA, United
Kingdom [re-int], Uzbekistan

Harpy Eagle
Argentina, Belize, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
French Guiana, Guatemala, Guyana,
Honduras, Mexico, Nicaragua,
Panama, Paraguay, Peru, Suriname

Harpyhaliaetus solitarius <sup>21</sup>
Solitary Eagle
Argentina, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
French Guiana, Guatemala, Guyana,
Honduras, Mexico, Nicaragua,
Panama, Paraguay, Peru, Suriname,
Venezuela

Henicapernis infuscatus 21 Black Honey-buzzard Papua New Guinea

Ichthyophaga humilis 21 Lesser Fish-eagle China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, Viet Nam

Ichthyophaga ichthyaetus <sup>21</sup> Grey-headed Fish-eagle Bangladesh, Brunei, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Singapore, Thailand, Viet Nam

Leucopternis plumbea <sup>21</sup> Plumbeous Hawk Colombia, Ecuador, Panama, Peru

Leucopternis polionota <sup>21</sup>
Mantled Hawk
Argentina, Brazil, Paraguay

Leucopternis semiplumbea 21
Semiplumbeous Hawk
Colombia, Costa Rica, Ecuador,
Honduras, Panama

Megatriarchis doriae 21 Doria's Goshawk Indonesia, Papua New Guinea

Morphnus guianensis <sup>21</sup>
Crested Eagle
Argentina, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
French Guiana, Guatemala, Guyana,
Honduras, Panama, Paraguay, Peru,
Suriname, Venezuela

Oroaetus isidori 21 Black-and-chestnut Eagle Argentina, Bolivia, Colombia, Ecuador, Peru, Venezuela

Sarcogyps calvus <sup>21</sup>
Red-headed Vulture
Bangladesh, Bhutan, Cambodia,
China, India, Laos, Malaysia,
Myanmar, Pakistan, Thailand, Viet
Nam

Spilornis elgini <sup>21</sup> Andaman Serpent-eagle India (Andaman & Nicobar Is) Spilornis minimus <sup>21</sup>

Nicobar Serpent-eagle India

Spizaetus lanceolatus <sup>21</sup> Sulawesi Hawk-eagle Indonesia

Spizastur melanoleucus <sup>21</sup>
Black-and-white Hawk-eagle
Argentina, Bolivia, Colombia, Costa
Rica, French Guiana, Guatemala,
Guyana, Honduras, Mexico,
Nicaragua, Panama, Peru, Suriname,
Venezuela



# Family FALCONIDAE

Falco chicquera 21 Red-necked Falcon

Bangladesh, India, Nepal, Pakistan

Falco deiroleucus 21

Orange-breasted Falcon
Argentina, Bolivia, Brazil,
Colombia, Costa Rica, Ecuador,
Guatemala, Guyana, Honduras,
Mexico, Nicaragua, Panama,
Paraguay, Peru, Suriname, Trinidad
and Tobago, Venezuela

Falco novaeseelandiae 21 New Zealand Falcon

New Zealand

Microhierax latifrons 21 White-fronted Falconet Malaysia

Microhierax melanoleucus 21

Pied Falconet

Bangladesh, China, India, Laos, Viet Nam

Phalcoboenus australis 21

Striated Caracara Argentina, Chile, Falkland Islands

Polihierax insignis 21 White-rumped Falcon Cambodia, Laos, Myanmar, Thailand, Viet Nam

#### Order GALLIFORMES

#### Family MEGAPODIIDAE

Megapodius bernsteinii 21

Sula Scrubfowl Indonesia

Megapodius cumingii 21 Tabon Scrubfowl Indonesia, Malaysia, Philippines

#### Family CRACIDAE

Aburria aburri 21 Wattled Guan

Colombia, Ecuador, Peru, Venezuela

Chamaepetes unicolor 21

Black Guan

Costa Rica, Panama

Penelope jacucaca 21 White-browed Guan

Brazil

Penelope pileata 21 White-crested Guan Brazil

# Family PHASIANIDAE

Agriocharis ocellata 21 Ocellated Turkey Belize, Guatemala, Mexico Alectoris magna 21

Rusty-necklaced Partridge China

Anurophasis monorthonyx 21

Snow Mountain Quail Indonesia

Arborophila atrogularis 21

White-cheeked Partridge

Bangladesh, China, India, Myanmar

Arborophila crudigularis 21

Taiwan Partridge

Bonasa sewerzowi 21

Chinese Grouse

China

Chrysolophus amherstiae 21

Lady Amherst's Pheasant China, Myanmar

Chrysolophus pictus 21

Golden Pheasant

China

Crossoptilon auritum 21

Blue Eared-pheasant

China

Cyrtonyx ocellatus 21

Ocellated Quail

Guatemala, Honduras, Mexico, Nicaragua

Dendragapus falcipennis 21

Siberian Grouse

China, Russia

Dendrortyx macroura 21

Long-tailed Wood-partridge Mexico

Mexico

Gallus sonneratii 21

Grey Junglefowl

India

Lophura swinhoii 21

Swinhoe's Pheasant

Taiwan

Melanoperdix nigra 21

Black Partridge

Indonesia, Malaysia

Odontophorus atrifrons 21

Black-fronted Wood-quail

Colombia, Venezuela

Odontophorus columbianus 21

Venezuelan Wood-quail

Venezuela

Odontophorus dialeucos 21

Tacarcuna Wood-quail

Panama

Odontophorus hyperythrus 21

Chestnut Wood-quail

Colombia

Odontophorus leucolaemus 21

Black-breasted Wood-quail

Costa Rica, Panama

Odontophorus melanonotus 21

Dark-backed Wood-quail Colombia, Ecuador

Polyplectron chalcurum 21

Bronze-tailed Peacock-pheasant Indonesia

Syrmaticus mikado 21

Mikado Pheasant

Taiwan

Syrmaticus soemmerringii 21

Copper Pheasant

Japan

Tetrao mlokosiewiczi 21

Caucasian Grouse

Armenia, Azerbaijan, Georgia, Iran,

Russia, Turkey

Tetraophasis obscurus 21

Chestnut-throated Partridge

China

Tetraophasis szechenyii 21

**Buff-throated Partridge** 

China, India

Tragopan satyra 21

Satyr Tragopan

Bhutan, China, India, Nepal

Tragopan temminckii 21

Temminck's Tragopan

China, India, Myanmar, Viet Nam

#### Order GRUIFORMES

# Family TURNICIDAE

Turnix ocellata 21 Spotted Buttonquail

Philippines

# Family GRUIDAE

Grus antigone 21

Sarus Crane

Australia, Brunei, Cambodia, India, Laos, Nepal, Philippines (ex?),

Thailand (ex?), Viet Nam

#### Family RALLIDAE

Gallirallus australis 21

Weka

New Zealand

Gallirallus rovianae 21

Roviana Rail

Solomon Islands

Laterallus spilonotus 21

Galápagos Rail

Ecuador

Micropygia schomburgkii 21

Ocellated Crake

Bolivia, Brazil, Colombia, French Guiana, Guyana, Peru, Suriname,

Venezuela

Neocrex colombianus <sup>21</sup> Colombian Crake Colombia, Ecuador, Panama

Porzana paykullii <sup>21</sup> Band-bellied Crake China, Russia. \* China, Indonesia, Malaysia, Philippines, South Korea, Thailand, Viet Nam

Rougetius rougetii 21 Rouget's Rail Eritrea, Ethiopia

#### Family OTIDIDAE

Eupodotis caerulescens 21 Blue Bustard Lesotho, South Africa

Eupodotis humilis 21 Little Brown Bustard Ethiopia, Somalia

Neotis nuba <sup>21</sup> Nubian Bustard Chad, Mali, Mauritania, Niger, Sudan

Tetrax tetrax 21 Little Bustard

Albania?, Algeria, Bulgaria (ex), China, Czech Republic (ex), France, Greece (ex), Iran, Iraq?, Italy, Kazakhstan, Kyrgyzstan, Morocco, Portugal, Russia, Spain, Turkey, Ukraine, Uzbekistan. \* Azerbaijan?, Egypt, Georgia, Israel, Libya, Pakistan, Romania, Tajikistan, Tunisia, Turkmenistan, Yugoslavia

# Order CHARADRIIFORMES

# Family HAEMATOPODIDAE

Haematopus moquini 21 African Oystercatcher Namibia, South Africa

#### Family GLAREOLIDAE

Glareola nordmanni <sup>21</sup>
Black-winged Pratincole
Armenia, Belarus, Hungary, Iraq,
Kazakhstan, Moldova, Romania,
Russia, Syria, Ukraine. \* Angola,
Botswana, Burundi, Cameroon,
Chad, Cyprus, Egypt, Ethiopia, Iran,
Israel, Mali, Mauritania, Namibia,
Nigeria, Rwanda, Saudi Arabia,
South Africa, Sudan, Turkey,
Uganda, Zaire, Zambia

#### Family CHARADRIIDAE

Charadrius javanicus 21 Javan Plover Indonesia Charadrius peronii 21

Malaysian Plover Brunei, Indonesia, Malaysia, Philippines, Thailand, Viet Nam

Charadrius placidus 21 Long-billed Plover

China, Japan, North Korea, Russia. \* China, India, Japan, Laos, Malaysia, Myanmar, North Korea, South Korea

Phegornis mitchellii 21 Diademed Sandpiper-plover

Argentina, Bolivia, Chile, Peru

Pluvianellus socialis 21 Magellanic Plover Argentina, Chile

Vanellus cinereus 21
Grey-headed Lapwing
China, Japan, Mongolia. \*
Bangladesh, Cambodia, China, India,
Laos, Myanmar, Nepal, Philippines,
Taiwan, Thailand, Viet Nam

# Family SCOLOPACIDAE

Coenocorypha aucklandica <sup>21</sup> New Zealand Snipe New Zealand (Auckland Is, Chatham Is)

Gallinago hardwickii 21 Latham's Snipe

Japan. \* Australia, China, Indonesia, Papua New Guinea, Taiwan

Gallinago imperialis <sup>21</sup> Imperial Snipe Colombia, Ecuador, Peru

Gallinago media 21

Great Snipe
Belarus, Denmark (ex), Estonia,
Finland, Germany (ex), Latvia,
Lithuania, Netherlands (ex), Norway,
Poland, Russia, Sweden, Ukraine. \*
Angola, Burkina Faso, Burundi,
Cameroon, Chad, Congo, Côte
d'Ivoire, Cyprus, Egypt, Ethiopia,
Gabon, Ghana, India, Iran, Kenya,
Liberia, Malawi, Mali, Mauritania,
Mozambique, Namibia, Nigeria,
Rwanda, Saudi Arabia, Sierra Leone,
South Africa, Sudan, Tanzania,
Togo, Turkey, Uganda, Yemen,
Zaire, Zambia, Zimbabwe

Gallinago stricklandii <sup>21</sup> Fuegian Snipe Argentina, Chile, Falkland Islands

Limnodromus semipalmatus <sup>21</sup>
Asian Dowitcher
China, Mongolia, Russia. \*
Australia, Bangladesh, Brunei,
Cambodia, Hong Kong, India,
Indonesia, Japan, Malaysia,
Myanmar, Philippines, Singapore,

Thailand, Viet Nam

Limosa haemastica 21 Hudsonian Godwit Canada, USA. \* Argentina, Barbados, Bolivia, Brazil, Chile, Falkland Islands, Mexico, Paraguay, Peru, Uruguay, Venezuela

Numenius madagascariensis <sup>21</sup>
Far Eastern Curlew
China, Mongolia, Russia. \*
Australia, Brunei, China, Federated
States of Micronesia, Fiji, Hong
Kong, Indonesia, Japan, Malaysia,
New Zealand, North Korea, Palau,
Papua New Guinea, Philippines,
South Korea, Taiwan, Thailand,
Western Samoa

Scolopax celebensis 21 Sulawesi Woodcock Indonesia

# Family LARIDAE

Larus heermanni 21 Heermann's Gull Mexico, USA

Larus pacificus 21 Pacific Gull Australia

Larus relictus 21
Relict Gull
China, Kazakhstan, Mongolia,
Russia \* South Korea Viet Nam

China, Kazakhstan, Mongolia, Russia. \* South Korea, Viet Nam Sterna balaenarum 21

Damara Tern Angola?, Namibia, South Africa. \* Angola, Cameroon, Congo, Gabon, Ghana, Nigeria, Togo, Zaire?

Sterna elegans 21 Elegant Tern Mexico, USA

# Family ALCIDAE

Brachyramphus marmoratus <sup>21</sup> Marbled Murrelet Canada, Russia, USA

Synthliboramphus craveri 21 Craveri's Murrelet Mexico, USA

Synthliboramphus hypoleucus <sup>21</sup> Xantus's Murrelet Canada, Mexico, USA

#### Order COLUMBIFORMES

#### Family COLUMBIDAE

Caloenas nicobarica 21
Nicobar Pigeon
Cambodia, India (Andaman &
Nicobar Is), Indonesia, Malaysia,
Myanmar, Palau, Papua New



Guinea, Philippines, Solomon Islands, Thailand, Viet Nam

Columba albinucha 21 White-naped Pigeon Cameroon, Sudan, Uganda, Zaire

Columba araucana 21 Chilean Pigeon Argentina, Chile

Columba elphinstonii 21 Nilgiri Wood-pigeon India

Columba janthina 21 Japanese Wood-pigeon Japan, South Korea, Taiwan

Columba palumboides 21 Andaman Wood-pigeon India

Columba pollenii 21 Comoro Olive-pigeon Comoros

Cryptophaps poecilorrhoa<sup>21</sup> Sombre Pigeon Indonesia

Ducula finschii 21
Finsch's Imperial-pigeon
Papua New Guinea

Ducula melanochroa <sup>21</sup>
Bismarck Imperial-pigeon
Papua New Guinea

Gallicolumba canifrons 21
Palau Ground-dove
Palau

Gallicolumba luzonica 21 Luzon Bleeding-heart Philippines

Gallicolumba stairi 21
Shy Ground-dove
American Samoa, Fiji, Tonga, Wallis
and Futuna Islands, Western Samoa

Gallicolumba xanthonura 21 White-throated Ground-dove Federated States of Micronesia, Guam (ex), Northern Marianas

Geophaps smithii 21 Partridge Pigeon Australia

Geotrygon caniceps 21 Grey-headed Quail-dove Cuba, Dominican Republic, Haiti

Geotrygon goldmani<sup>21</sup>
Russet-crowned Quail-dove
Colombia, Panama

Geotrygon mystacea <sup>21</sup>
Bridled Quail-dove
Anguilla, Antigua and Barbuda,
Bahamas, Dominica, Guadeloupe,
Martinique, Montserrat, Netherlands
Antilles, Puerto Rico, St Kitts and

Nevis, St Lucia, Virgin Islands (British), Virgin Islands (US)

Geotrygon versicolor 21 Crested Quail-dove Jamaica

Gymnophaps mada <sup>21</sup> Long-tailed Mountain-pigeon Indonesia

Henicophaps albifrons 21 New Guinea Bronzewing Indonesia, Papua New Guinea

Henicophaps foersteri 21 New Britain Bronzewing Papua New Guinea

Leptotila battyi 21 Brown-backed Dove Panama

Macropygia rufipennis 21 Andaman Cuckoo-dove India

Phaps histrionica 21 Flock Bronzewing Australia

Ptilinopus alligator 21
Black-banded Fruit-dove
Australia

Ptilinopus coralensis 21 Atoll Fruit-dove French Polynesia

Ptilinopus eugeniae 21
White-headed Fruit-dove
Solomon Islands

Ptilinopus layardi 21 Whistling Dove Fiji

Ptilinopus merrilli <sup>21</sup> Cream-bellied Fruit-dove Philippines

Ptilinopus monacha 21 Blue-capped Fruit-dove Indonesia

Ptilinopus rarotongensis 21 Cook Islands Fruit-dove Cook Islands

Ptilinopus roseicapilla 21 Mariana Fruit-dove Guam, Northern Marianas

Ptilinopus tannensis 21
Tanna Fruit-dove
Vanuatu

Streptopelia reichenowi <sup>21</sup> White-winged Collared-dove Ethiopia, Kenya, Somalia

Treron capellei 21 Large Green-pigeon Brunei, Indonesia, Malaysia, Myanmar, Thailand Treron floris 21
Flores Green-pigeon Indonesia

Treron formosae 21 Whistling Green-pigeon Japan, Philippines, Taiwan

Treron fulvicollis 21 Cinnamon-headed Green-pigeon Brunei, Indonesia, Malaysia, Myanmar, Thailand

Treron oxyura 21 Sumatran Green-pigeon Indonesia

Treron pembaensis 21
Pemba Green-pigeon
Tanzania

Treron seimundi 21 Yellow-vented Green-pigeon Laos, Malaysia, Thailand, Viet Nam

Treron sieboldii 21 White-bellied Green-pigeon China, Japan, Laos, Taiwan, Thailand. Viet Nam

Treron teysmannii 23 Sumba Green-pigeon Indonesia

Trugon terrestris <sup>21</sup>
Thick-billed Ground-pigeon
Indonesia, Papua New Guinea

# Order PSITTACIFORMES

# Family PSITTACIDAE

Agapornis fischeri 21 Fischer's Lovebird Tanzania

Alisterus amboinensis 21 Moluccan King-parrot Indonesia

Amazona collaria 21 Yellow-billed Amazon Jamaica

Amazona dufresniana 21 Blue-cheeked Amazon French Guiana, Guyana, Suriname, Venezuela

Amazona finschi 21 Lilac-crowned Amazon Mexico

Amazona leucocephala <sup>21</sup> Cuban Amazon Bahamas, Cayman Islands, Cuba

Amazona ventralis 21
Hispaniolan Amazon
Dominican Republic, Haiti, Puerto
Rico [int]

Aprosmictus jonquillaceus 21 Olive-shouldered Parrot Indonesia Aratinga erythrogenys 21 Red-masked Parakeet Ecuador, Peru

Brotogeris pyrrhopterus <sup>21</sup> Grey-cheeked Parakeet Ecuador, Peru

Cacatua goffini 21 Tanimbar Cockatoo Indonesia

Cacatua leadbeateri 21 Pink Cockatoo Australia

Cacatua pastinator 21
Western Corella
Australia

Charmosyna margarethae 21 Duchess Lorikeet Papua New Guinea, Solomon Islands

Charmosyna multistriata 21
Striated Lorikeet

Indonesia, Papua New Guinea
Charmosyna palmarum 21

Palm Lorikeet Solomon Islands, Vanuatu

Cyanoramphus auriceps 21 Yellow-fronted Parakeet New Zealand

Enicognathus leptorhynchus 21 Slender-billed Parakeet Chile

Eos reticulata 21 Blue-streaked Lory Indonesia

Eos semilarvata 21 Blue-eared Lory Indonesia

Loriculus pusillus 21
Yellow-throated Hanging-parrot
Indonesia

Loriculus tener 21 Green-fronted Hanging-parrot Papua New Guinea

Lorius albidinuchus 21
White-naped Lory
Papua New Guinea

Micropsitta geelvinkiana 21 Geelvink Pygmy-parrot Indonesia

Nannopsittaca dachilleae 21 Amazonian Parrotlet Peru

Neophema pulchella 21 Turquoise Parrot Australia

Nestor notabilis 21 Kea New Zealand Pionopsitta pileata 21

Pileated Parrot Argentina, Brazil, Paraguay

Prioniturus discurus <sup>21</sup> Blue-crowned Racquet-tail Philippines

Prioniturus flavicans<sup>21</sup>
Yellowish-breasted Racquet-tail
Indonesia

Prioniturus mada 21 Buru Racquet-tail Indonesia

Probosciger aterrimus 21
Palm Cockatoo
Australia, Indonesia, Papua New
Guinea

Prosopeia personata 21 Masked Shining-parrot Fiii

Prosopeia splendens 21 Crimson Shining-parrot

Psephotus dissimilis 21 Hooded Parrot Australia

Psittacula caniceps 21 Nicobar Parakeet India (Andaman & Nicobar Is)

Psittacula derbiana 21
Derbyan Parakeet
China, India

Psittinus cyanurus 21
Blue-rumped Parrot
Brunei, Indonesia, Malaysia,
Myanmar, Thailand

Pyrrhura rhodocephala 21 Rose-headed Parakeet Venezuela

Touit costaricensis 21 Red-fronted Parrotlet Costa Rica, Panama

Order CUCULIFORMES

Family MUSOPHAGIDAE

Tauraco fischeri 21 Fischer's Turaco Kenya, Somalia, Tanzania

Family CUCULIDAE

Carpococcyx renauldi 21
Coral-billed Ground-cuckoo
Cambodia, Laos, Thailand, Viet Nam
Centropus andamanensis 21

Brown Coucal India, Myanmar

Centropus chalybeus 21 Biak Coucal Indonesia

Indonesia

Centropus rectunguis 21 Short-toed Coucal Brunei, Indonesia, Malaysia Centropus spilopterus 21 Kai Coucal

Centropus unirufus <sup>21</sup> Rufous Coucal Philippines

Coua verreauxi 21 Verreaux's Coua Madagascar

Neomorphus squamiger 21 Scaled Ground-cuckoo Brazil

Order STRIGIFORMES

Family **TYTONIDAE**Tyto multipunctata 21

Lesser Sooty-owl Australia

Family STRIGIDAE

Aegolius harrisii 21 Buff-fronted Owl Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Venezuela

Aegolius ridgwayi 21
Unspotted Saw-whet Owl
Costa Rica, El Salvador, Guatemala,
Mexico

Bubo nipalensis 21 Spot-bellied Eagle-owl Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal, Sri Lanka. Thailand, Viet Nam

Glaucidium castanonotum 21 Chestnut-backed Owlet Sri Lanka

Ketupa flavipes <sup>21</sup>
Tawny Fish-owl
Bangladesh, Bhutan, China, India,
Laos, Myanmar, Nepal, Taiwan, Viet
Nam

Ninox affinis 21 Andaman Hawk Owl India

Otus balli 21 Andaman Scops Owl India

Otus barbarus 21 Santa Barbara Screech-owl Guatemala, Mexico

Otus colombianus 21 Colombian Screech-owl Colombia, Ecuador



Otus hartlaubi <sup>21</sup>
São Tomé Scops-owl
São Tomé & Príncipe (Príncipe?,
São Tomé)

Otus pembaensis 21 Pemba Scops-owl Tanzania

Otus silvicola 21 Wallace's Scops-owl Indonesia

Strix occidentalis 21 Spotted Owl Canada, Mexico, USA

Xenoglaux loweryi 21 Long-whiskered Owlet Peru

# Order CAPRIMULGIFORMES

# Family PODARGIDAE

Batrachostomus javensis 21 Javan Frogmouth Indonesia

Batrachostomus moniliger 21 Sri Lanka Frogmouth India, Sri Lanka

#### Family CAPRIMULGIDAE

Caprimulgus concretus 21 Bonaparte's Nightjar Brunei, Indonesia, Malaysia

Caprimulgus hirundinaceus <sup>21</sup> Pygmy Nightjar Brazil

Caprimulgus whitelyi 21 Roraiman Nightjar Venezuela

Eleothreptus anomalus 21 Sickle-winged Nightjar Argentina, Brazil, Paraguay, Uruguay

Macropsalis creagra 21 Long-trained Nightjar Argentina, Brazil

Nyctiphrynus mcleadii 21
Eared Poorwill
Mexico

Nyctiphrynus rosenbergi <sup>21</sup> Choco Poorwill Colombia, Ecuador

Siphonorhis brewsteri 21 Least Poorwill Dominican Republic, Haiti

#### Order APODIFORMES

#### Family APODIDAE

Collocalia francica 21 Mascarene Swiftlet Mauritius, Réunion

Cypseloides rothschildi 21 Rothschild's Swift Argentina, Bolivia, Peru

Hydrochraus gigas 21 Waterfall Swift Indonesia, Malaysia

#### Family TROCHILIDAE

Anthocephala floriceps 21 Blossomcrown Colombia

Augastes lumachellus 21 Hooded Visorbearer Brazil

Augastes scutatus 21 Hyacinth Visorbearer Brazil

Avocettula recurvirostris <sup>21</sup>
Fiery-tailed Awlbill
Brazil, Colombia, Ecuador, French
Guiana, Guyana, Suriname,
Venezuela

Campylopterus excellens 21 Long-tailed Sabrewing Mexico

Campylopterus phainopeplus 21 Santa Marta Sabrewing Colombia

Campylopterus villaviscensia 21 Napo Sabrewing Ecuador, Peru

Eriocnemis derbyi <sup>21</sup>
Black-thighed Puffleg
Colombia, Ecuador

Goethalsia bella 21 Rufous-cheeked Hummingbird

Colombia, Panama

Haplophaedia lugens 21

Hoary Puffleg

Colombia, Ecuador

Heliodaxa gularis 21 Pink-throated Brilliant Colombia, Ecuador, Peru

Lophornis stictolophus <sup>21</sup>
Spangled Coquette
Argentina, Bolivia, Brazil,
Colombia, Ecuador, Peru, Venezuela

Mellisuga helenae 21 Bee Hummingbird Cuba Metallura iracunda 21 Perijá Metaltail Colombia, Venezuela

Metallura odomae 21 Neblina Metaltail Ecuador, Peru

Oreotrochilus adela 21 Wedge-tailed Hillstar Bolivia

Phaethornis koepckeae 21 Koepcke's Hermit Peru

Philodice bryantae 21
Magenta-throated Woodstar
Costa Rica, Panama

Phlogophilus harterti 21 Peruvian Piedtail Peru

Phlogophilus hemileucurus <sup>21</sup> Ecuadorian Piedtail Colombia, Ecuador, Peru

Polyonymus caroli 21
Bronze-tailed Comet
Argentina, Brazil, Paraguay

Ramphodon naevius 21 Saw-billed Hermit Brazil

#### Order TROGONIFORMES

#### Family TROGONIDAE

Pharomachrus macinno 21 Resplendent Quetzal Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

Priotelus roseigaster 21 Hispaniolan Trogon Dominican Republic, Haiti

Trogon bairdii 21 Baird's Trogon Costa Rica, Panama

#### Order CORACIIFORMES

#### Family ALCEDINIDAE

Actenoides lindsayi 21 Spotted Kingfisher Philippines

Alcedo cyanopecta 21 Indigo-banded Kingfisher Philippines

Pelargopsis amauropterus <sup>21</sup> Brown-winged Kingfisher Bangladesh, India, Malaysia, Myanmar, Thailand Tanysiptera riedelii 21 Biak Paradise-kingfisher Indonesia

Todirhamphus australasia 21 Cinnamon-banded Kingfisher Indonesia

Todirhamphus enigma 21
Talaud Kingfisher
Indonesia

Todirhamphus funebris 21 Sombre Kingfisher Indonesia

Todirhamphus nigrocyaneus 21 Blue-black Kingfisher Indonesia, Papua New Guinea

#### Family TODIDAE

Todus angustirostris 21 Narrow-billed Tody Dominican Republic, Haiti

# Family MOMOTIDAE

Electron carinatum 21
Keel-billed Motmot
Belize, Costa Rica, Guatemala,
Honduras, Mexico, Nicaragua

### Family CORACIIDAE

Atelornis pittoides <sup>21</sup> Pitta-like Ground-roller Madagascar

# Family BUCEROTIDAE

Anorrhinus tickelli 21 Brown Hornbill China, India, Laos, Myanmar, Thailand, Viet Nam

Anthracoceros coronatus 21 Malabar Pied-Hornbill India, Sri Lanka

Anthracoceros malayanus 21 Black Hornbill Brunei, Indonesia, Malaysia, Thailand

Buceros hydrocorax 21 Rufous Hornbill Philippines

Buceros vigil 21 Helmeted Hornbill Brunei, Indonesia, Malaysia, Myanmar, Thailand

Ceratogymna cylindricus <sup>21</sup>
Brown-cheeked Hornbill
Benin, Côte d'Ivoire, Ghana, Guinea,
Liberia, Nigeria, Sierra Leone

Ceratogymna elata <sup>21</sup>
Yellow-casqued Hornbill
Cameroon, Côte d'Ivoire, Ghana,
Guinea, Guinea-Bissau, Liberia,

Mali, Nigeria, Senegal, Sierra Leone, Togo

Ocyceros griseus 21 Malabar Grey-hornbill India

Penelopides affinis <sup>21</sup> Mindanao Hornbill Philippines

Penelopides manillae 21 Luzon Hornbill Philippines

Penelopides samarensis 21 Samar Hornbill Philippines

#### Order PICIFORMES

# Family BUCCONIDAE

Bucco noanamae 21 Sooty-capped Puffbird Colombia

Micromonacha lanceolata 21 Lanceolated Monklet Brazil, Colombia, Costa Rica, Ecuador, Panama, Peru

Nonnula amaurocephala 21 Chestnut-headed Nunlet Brazil

#### Family CAPITONIDAE

Capito squamatus 21
Orange-fronted Barbet
Colombia, Ecuador

Eubucco tucinkae<sup>21</sup> Scarlet-hooded Barbet Peru

Lybius chaplini 21 Chaplin's Barbet Zambia

Lybius rubrifacies 21
Red-faced Barbet
Rwanda, Tanzania, Uganda

Megalaima corvina 21 Brown-throated Barbet Indonesia

Megalaima javensis 21 Black-banded Barbet Indonesia

Megalaima rafflesii <sup>21</sup> Red-crowned Barbet Brunci, Indonesia, Malaysia, Myanmar, Thailand

Semnornis ramphastinus 21 Toucan Barbet Colombia, Ecuador

#### Family INDICATORIDAE

Indicator archipelagicus <sup>21</sup> Malaysian Honeyguide Brunei, Indonesia, Malaysia, Thailand

Indicator pumilio 21 Dwarf Honeyguide Rwanda, Uganda, Zaire

Indicator xanthonotus 21 Yellow-rumped Honeyguide Bhutan, India, Myanmar, Nepal, Pakistan

#### Family RAMPHASTIDAE

Andigena cucullata 21 Hooded Mountain-toucan Bolivia, Peru

Andigena hypoglauca 23 Grey-breasted Mountain-toucan Colombia, Ecuador, Peru

Andigena laminirostris 21 Plate-billed Mountain-toucan Colombia, Ecuador

Andigena nigrirostris 21
Black-billed Mountain-toucan
Colombia, Ecuador, Venezuela

Aulacorhynchus huallagae 21 Yellow-browed Toucanet Peru

Baillonius bailloni 21 Saffron Toucanet Brazil

#### Family PICIDAE

Campethera notata 21 Knysna Woodpecker South Africa

Dendrocopos dorae 21 Arabian Woodpecker Saudi Arabia, Yemcn

Dendrocopos leucopterus <sup>21</sup>
White-winged Woodpecker
Afghanistan, China, Kazakhstan,
Kyrgyzstan, Tajikistan,
Turkmenistan, Uzbekistan

Dendropicos stierlingi <sup>21</sup> Stierling's Woodpecker Malawi, Mozambique, Tanzania

Dryocopus hodgei 21 Andaman Woodpecker India

Dryocopus schulzi 21 Black-bodied Woodpecker Argentina, Bolivia, Paraguay

Geocolaptes olivaceus 21 Ground Woodpecker Lesotho, South Africa



Melanerpes herminieri 21 Guadeloupe Woodpecker Guadeloupe

Nesoctites micromegas 21
Antillean Piculet
Dominican Republic, Haiti

Piculus aurulentus 21 Yellow-browed Woodpecker Brazil

Picumnus nebulosus 21 Mottled Piculet Argentina, Brazil, Uruguay

Picumnus steindachneri 21 Speckle-chested Piculet Peru

Picumnus subtilis 21
Fine-barred Piculet
Peru
Vaniliarnis chacaens

Veniliornis chocoensis 21 Choco Woodpecker Colombia, Ecuador

#### Order PASSERIFORMES

#### Family DENDROCOLAPTIDAE

Campylorhamphus pucherani<sup>21</sup> Greater Scythebill Colombia, Ecuador, Peru

#### Family FURNARIIDAE

Asthenes cactorum 21 Cactus Canastero Peru

Asthenes urubambensis 21 Line-fronted Canastero Bolivia, Peru

Clibanornis dendrocolaptoides 21 Canebrake Groundcreeper Argentina, Brazil, Paraguay

Cranioleuca dissita 21 Coiba Spinetail Panama

Hylocryptus rectirostris 21 Chestnut-capped Foliage-gleaner Brazil

Leptasthenura setaria 21 Araucaria Tit-spinetail Argentina, Brazil

Leptasthenura yanacensis 21 Tawny Tit-spinetail Bolivia, Peru

Limnornis rectirostris 21 Straight-billed Reedhaunter Argentina, Brazil, Uruguay

Margarornis bellulus 21 Beautiful Treerunner Panama Phacellodomus dorsalis 21 Chestnut-backed Thornbird Peru

Philydor amaurotis<sup>21</sup> White-browed Foliage-gleaner Argentina, Brazil

Philydor dimidiatus <sup>21</sup> Russet-mantled Foliage-gleaner Brazil, Paraguay

Schizoeaca perijana <sup>21</sup> Perijá Thistletail Colombia, Venezuela

Simoxenops ucayalae 21 Peruvian Recurvebill Bolivia, Brazil, Peru

Siptornopsis hypochondriacus 21 Great Spinetail Peru

Spartonoica maluroides 21 Bay-capped Wren-spinetail Argentina, Brazil, Uruguay

Synallaxis cherriei <sup>21</sup> Chestnut-throated Spinetail Brazil, Colombia, Ecuador, Peru

Synallaxis fuscorufa 21 Rusty-headed Spinetail Colombia

Thripophaga berlepschi 21 Russet-mantled Softtail Peru

Upucerthia harterti <sup>21</sup> Bolivian Earthcreeper Bolivia

Xenerpestes singularis 21 Equatorial Greytail Ecuador, Peru

# Family FORMICARIIDAE

Cercomacra brasiliana 21 Rio de Janeiro Antbird Brazil

Drymophila genei 21 Rufous-tailed Antbird Brazil

Drymophila ochropyga 21
Ochre-rumped Antbird
Brazil

Dysithamnus stictothorax 21 Spot-breasted Antvireo Argentina, Brazil

Formicivora serrana 21 Serra Antwren Brazil

Grallaria bangsi 21 Santa Marta Antpitta Colombia Grallaria blakei 21 Chestnut Antpitta Peru

Grallaria eludens 21 Elusive Antpitta Peru

Grallaria excelsa 21 Great Antpitta Venezuela

Grallaricula lineifrons <sup>21</sup> Crescent-faced Antpitta Colombia, Ecuador

Grallaricula loricata 21 Scallop-breasted Antpitta Venezuela

Grallaricula ochraceifrons <sup>21</sup> Ochre-fronted Antpitta Peru

Grallaricula peruviana <sup>21</sup> Peruvian Antpitta Ecuador, Peru

Herpsilochmus pileatus <sup>21</sup> Black-capped Antwren Brazil

Hylopezus ochroleucus <sup>21</sup> White-browed Antpitta Brazil

Myrmotherula klagesi <sup>21</sup> Klages's Antwren Brazil

Rhegmatorhina gymnops <sup>21</sup> Santarem Antbird Brazil

Rhegmatorhina hoffmannsi 21 White-breasted Antbird Brazil

Thamnophilus praecox 21 Cocha Antshrike Ecuador

#### Family CONOPOPHAGIDAE

Conopophaga roberti 21 Hooded Gnateater Brazil

#### Family RHINOCRYPTIDAE

Melanopareia maranonica 21 Marañon Crescent-chest Peru

Merulaxis ater 21 Slaty Bristlefront Brazil

Psilorhamphus guttatus <sup>21</sup> Spotted Bamboowren Argentina, Brazil

# Family COTINGIDAE

Ampelioides tschudii 21 Scaled Fruiteater Bolivia, Colombia, Ecuador, Peru, Venezuela

Carpodectes hopkei 21 Black-tipped Cotinga Colombia, Ecuador, Panama

Carpornis cucullatus 21 Hooded Berryeater Brazil

Conioptilon mcilhennyi 21 Black-faced Cotinga Peru

Pachyramphus spodiurus <sup>21</sup> Slaty Becard Ecuador, Peru

Phibalura flavirostris 21 Swallow-tailed Cotinga Argentina, Bolivia, Brazil

Pipreola chlorolepidota 21 Fiery-throated Fruiteater Colombia, Ecuador, Peru

Pipreola frontalis <sup>21</sup> Scarlet-breasted Fruiteater Bolivia, Colombia, Ecuador, Peru

Pipreola lubomirskii 21 Black-chested Fruiteater Colombia, Ecuador, Peru

Porphyrolaema porphyrolaema <sup>21</sup> Purple-throated Cotinga Brazil, Colombia, Ecuador, Peru

Procnias nudicollis 21
Bare-throated Bellbird
Argentina, Brazil, Paraguay

Tijuca atra <sup>21</sup>
Black-and-gold Cotinga
Brazil

#### Family PIPRIDAE

Chloropipo flavicapilla 21 Yellow-headed Manakin Colombia

Pipra iris 21 Opal-crowned Manakin Brazil

Piprites griseiceps 21 Grey-headed Piprites Costa Rica, Guatemala, Honduras, Nicaragua

#### Family TYRANNIDAE

Colombia, Panama

Alectrurus tricolor 21
Cock-tailed Tyrant
Argentina, Bolivia, Brazil, Paraguay
Aphanotriccus audax 21
Black-billed Flycatcher

Aphanotriccus capitalis 21 Tawny-chested Flycatcher Costa Rica, Nicaragua

Contopus ochraceus 21 Ochraceous Pewee Costa Rica, Panama

Culicivora caudacuta 21 Sharp-tailed Grass-tyrant Argentina, Bolivia, Brazil, Paraguay

Hemitriccus aenigma 21 Zimmer's Tody-tyrant Brazil

Hemitriccus cinnamomeipectus 21 Cinnamon-breasted Tody-tyrant Peru

Hemitriccus josephinae 21 Boat-billed Tody-tyrant Brazil, Guyana, Suriname

Hemitriccus nidipendulus 21 Hangnest Tody-tyrant Brazil

Hemitriccus orbitatus 21 Eye-ringed Tody-tyrant Brazil

Hemitriccus rufigularis 21 Buff-throated Tody-tyrant Bolivia, Peru

Knipolegus hudsoni 21 Hudson's Black-tyrant Argentina, Bolivia, Paraguay

Muscipipra vetula 21 Shear-tailed Grey Tyrant Argentina, Brazil, Paraguay

Myiophobus lintoni 21 Orange-banded Flycatcher Ecuador, Peru

Myiornis albiventris 21 White-bellied Pygmy-tyrant Bolivia, Peru

Myiotheretes fuscorufus 21 Rufous-bellied Bush-tyrant Bolivia, Peru

Ochthoeca piurae 21 Piura Chat-tyrant Peru

Ochthoeca salvini<sup>21</sup> Tumbes Tyrant

Phyllomyias griseocapilla 21 Grey-capped Tyrannulet Brazil

Phyllomyias reiseri 21 Reiser's Tyrannulet Brazil, Paraguay

Phylloscartes difficilis 21 Serra do Mar Tyrannulet Brazil Phylloscartes eximius 21
Southern Bristle-tyrant
Argentina, Brazil, Paraguay
Phylloscartes oustaleti 21
Oustalet's Tyrannulet

Brazil

Phylloscartes sylviolus 21 Bay-ringed Tyrannulet Argentina, Brazil, Paraguay

Phylloscartes venezuelanus 21 Venezuelan Bristle-tyrant Venezuela

Poecilotriccus albifacies 21 White-cheeked Tody-tyrant Peru

Polystictus pectoralis 21
Bearded Tachuri
Argentina, Bolivia, Brazil,
Colombia, Guyana, Paraguay,
Suriname, Uruguay, Venezuela

Polystictus superciliaris 21 Grey-backed Tachuri Brazil

Todirostrum viridanum 21 Maracaibo Tody-flycatcher Venezuela

Xenotriccus callizonus 21 Belted Flycatcher Guatemala, Mexico

Xenotriccus mexicanus 21 Pileated Flycatcher Mexico

Xolmis salinarum 21 Salinas Monjita Argentina

#### Family PITTIDAE

Pitta baudii <sup>21</sup>
Blue-headed Pitta
Brunei, Indonesia, Malaysia

Pitta caerulea 21
Giant Pitta
Indonesia, Malaysia, Myanmar,
Thailand

Pitta dohertyi <sup>21</sup>
Sula Pitta
Indonesia
Pitta elliotii <sup>21</sup>

Bar-bellied Pitta Cambodia, Laos, Thailand, Viet Nam

Pitta megarhyncha<sup>21</sup>
Mangrove Pitta

Bangladesh, Indonesia, Malaysia, Myanmar, Thailand

Pitta nipalensis 21
Blue-naped Pitta
Bangladesh, Bhutan, China, India,
Laos, Myanmar, Nepal, Viet Nam



Pitta soror 21 Blue-rumped Pitta Cambodia, China, Laos, Thailand, Viet Nam

# Family XENICIDAE

Xenicus gilviventris 21 South Island Rock Wren New Zealand

# Family PHILEPITTIDAE

Philepitta schlegeli 21 Schlegel's Asity Madagascar

# Family MENURIDAE

Menura alberti 21 Albert's Lyrebird Australia

# Family ALAUDIDAE

Certhilauda chuana 21 Short-clawed Lark Botswana, South Africa

Mirafra pulpa<sup>21</sup> Friedmann's Lark Ethiopia, Kenya

Mirafra williamsi 21 Williams's Lark Kenya

Spizocarys abbiensis 21 Obbia Lark Somalia

Spizocorys sclateri 21 Sclater's Lark Namibia, South Africa

# Family HIRUNDINIDAE

Psalidoprocne fuliginosa 21 Mountain Sawwing Cameroon, Equatorial Guinea, Nigeria

Tachycineta cyaneoviridis 21 Bahama Swallow Bahamas. \* Cuba, USA

Tachycineta euchrysea 21
Golden Swallow
Dominican Republic, Haiti, Jamaica

#### Family MOTACILLIDAE

Anthus chacoensis 21 Chaco Pipit Argentina, Paraguay Anthus hoeschi 21 Mountain Pipit Lesotho, South Africa Anthus melindae 21 Malindi Pipit Kenya, Somalia

Anthus sharpei 21 Sharpe's Longclaw Kenya

Macronyx flavicollis 21 Abyssinian Longclaw Ethiopia

Macronyx grimwoodi 21 Grimwood's Longclaw Angola, Zaire, Zambia

#### Family CAMPEPHAGIDAE

Coracina bicolor 21 Pied Cuckoo-shrike Indonesia

Coracina coerulescens <sup>21</sup> Blackish Cuckoo-shrike Philippines

Coracina dispar 21 Kai Cicadabird Indonesia

Coracina dohertyi <sup>21</sup> Sumba Cicadabird Indonesia

Coracina graueri 21 Grauer's Cuckoo-shrike Uganda, Zaire

Lalage sharpei 21 Samoan Triller Western Samoa

Pericrocotus cantonensis 21 Brown-rumped Minivet China

Pericrocotus erythropygius 21 White-bellied Minivet India, Myanmar

# Family PYCNONOTIDAE

Andropadus montanus 21 Cameroon Greenbul Cameroon, Nigeria

Ixos everetti 21 Yellowish Bulbul Philippines

Phyllastrephus baumanni <sup>21</sup>
Baumann's Greenbul
Côte d'Ivoire, Ghana, Liberia,
Nigeria, Sierra Leone, Togo

Phyllastrephus lorenzi 21 Sassi's Greenbul Uganda, Zaire

Phyllastrephus poliocephalus 21 Grey-headed Greenbul Cameroon, Nigeria Pycnonotus penicillatus 21 Yellow-eared Bulbul Sri Lanka

Pycnonotus priocephalus 21 Grey-headed Bulbul India

Pycnonotus taivanus 21 Styan's Bulbul Taiwan

Pycnonotus xantholaemus 21 Yellow-throated Bulbul India

Setornis criniger<sup>21</sup> Hook-billed Bulbul Brunei, Indonesia, Malaysia

# Family IRENIDAE

Chloropsis venusta 21 Blue-masked Leafbird Indonesia

### Family LANIIDAE

Laniarius mufumbiri 21 Papyrus Gonolek Burundi, Kenya, Rwanda, Uganda, Zaire

Laniarius turatii <sup>21</sup> Turati's Boubou Guinea, Guinea-Bissau, Sierra Leone

Lanius validirostris 21 Mountain Shrike Philippines

Malaconotus lagdeni 21 Lagden's Bush-shrike Côte d'Ivoire, Liberia, Rwanda, Sierra Leone, Uganda, Zaire

Pityriasis gymnocephala 21 Bornean Bristlehead Brunei, Indonesia, Malaysia

# Family VANGIDAE

Euryceros prevostii 21 Helmet Vanga Madagascar

#### Family BOMBYCILLIDAE

Bombycilla japonica 21 Japanese Waxwing Russia. \* China, Japan, North Korea, South Korea, Taiwan

## Family TROGLODYTIDAE

Henicorhina leucoptera 21 Bar-winged Wood-wren Peru

Thryomanes sissonii 21 Socorro Wren Mexico

# Family MIMIDAE

Melanoptila glabrirostris 21 Black Catbird Belize, Guatemala, Honduras, Mexico

Toxostoma guttatum <sup>21</sup> Cozumel Thrasher Mexico

#### Family PRUNELLIDAE

Prunella fagani<sup>21</sup> Yemen Accentor Saudi Arabia, Yemen

#### Family MUSCICAPIDAE

Acrocephalus griseldis 21 Basra Reed-warbler Iraq. \* Ethiopia, Kenya, Malawi, Mozambique, Saudi Arabia, Somalia, Sudan, Tanzania

Actinodura souliei 21 Streaked Barwing China, Viet Nam

Alcippe cinerea 21
Yellow-throated Fulvetta
Bangladesh, Bhutan, China, India,
Laos, Myanmar

Alcippe ruficapilla 21 Spectacled Fulvetta China, Laos

Alcippe rufogularis 21 Rufous-throated Fulvetta Bangladesh, Bhutan, Cambodia, China, India, Laos, Myanmar, Thailand, Viet Nam

Amytornis barbatus 21 Grey Grasswren

Amytornis housei 21 Black Grasswren Australia

Australia

Amytornis woodwardi 21 White-throated Grasswren Australia

Babax koslowi 21 Tibetan Babax China Babax waddelli 21 Giant Babax

China, India

Brachypteryx major 21 White-bellied Shortwing India

Brachypteryx stellata <sup>21</sup>
Gould's Shortwing
Bhutan, China, India, Myanmar,
Nepal, Viet Nam

Bradypterus bangwaensis <sup>21</sup> Cameroon Bracken-warbler Cameroon

Bradypterus caudatus <sup>21</sup> Long-tailed Bush-warbler Philippines

Bradypterus palliseri <sup>21</sup> Sri Lanka Bush-warbler Sri Lanka

Buettikoferella bivittata 21 Buff-banded Grassbird Indonesia

Cercomela dubia 21 Sombre Chat Ethiopia, Somalia

Cettia carolinae 21
Tanimbar Bush-warbler
Indonesia

Cettia parens 21 Shade Warbler Solomon Islands

Chaetops aurantius 21
Orange-breasted Rockjumper
Lesotho, South Africa

Chaetops frenatus 21 Rufous Rockjumper South Africa

Chrysomma poecilotis 21 Rufous-tailed Babbler China

Cichlherminia lherminieri 21 Forest Thrush Dominica, Guadeloupe, Montserrat, St Lucia

Cichlopsis leucogenys 21 Rufous-brown Solitaire Brazil, Guyana, Venezuela

Cinclidium frontale 21 Blue-fronted Robin Bhutan, China, India, Laos, Thailand, Viet Nam

Cisticola njombe 21 Churring Cisticola Malawi, Tanzania, Zambia

Clytorhynchus hamlini 21 Rennell Shrikebill Solomon Islands Clytorhynchus nigrogularis 21 Black-throated Shrikebill Fiji, Solomon Islands

Cochoa purpurea 21 Purple Cochoa Bhutan, China, India, Laos, Myanmar, Nepal, Thailand, Viet Nam

Cochoa viridis <sup>21</sup>
Green Cochoa
China, India, Laos, Myanmar, Nepal,
Thailand, Viet Nam

Colluricincla boweri 21 Bower's Shrike-thrush Australia

Crocias albonotatus 21 Spotted Crocias Indonesia

Cyornis caerulatus 21 Large-billed Blue-flycatcher Brunei, Indonesia, Malaysia

Cyornis herioti 21 Blue-breasted Flycatcher Philippines

Cyornis pallipes 21
White-bellied Blue-flycatcher
India

Cyornis turcosus 21 Malaysian Blue-flycatcher Brunei, Indonesia, Malaysia

Dromaeocercus brunneus 21
Brown Emu-tail

Madagascar

Epthianura crocea 21

Yellow Chat

Japan

Australia

Erithacus komadori 21

Ryukyu Robin

Eumyias albicaudata 21 Nilgiri Flycatcher India

Eumyias sordida 21 Dull-blue Flycatcher Sri Lanka

Ficedula harterti 21 Sumba Flycatcher Indonesia

Ficedula nigrorufa 21
Black-and-rufous Flycatcher
India

Ficedula rufigula 21 Rufous-throated Flycatcher Indonesia

Ficedula timorensis 21
Black-banded Flycatcher
Indonesia



Garrulax cachinnans 21 Rufous-breasted Laughingthrush India

Garrulax delesserti 21 Wynaad Laughingthrush India

Garrulax formosus 21 Red-winged Laughingthrush China, Viet Nam

Garrulax galbanus 21 Yellow-throated Laughingthrush Bangladesh, China, India, Myanmar

Garrulax jerdoni 21 Grey-breasted Laughingthrush India

Garrulax lunulatus 21 Barred Laughingthrush China

Garrulax maesi 21 Grey Laughingthrush China, Laos, Viet Nam

Garrulax merulinus 21 Spot-breasted Laughingthrush China, India, Laos, Myanmar, Thailand, Viet Nam

Garrulax milnei 21 Red-tailed Laughingthrush China, Laos, Myanmar, Thailand, Viet Nam

Garrulax nuchalis 21 Chestnut-backed Laughingthrush India, Myanmar

Garrulax rufifrons 21 Rufous-fronted Laughingthrush Indonesia

Garrulax virgatus 21 Striped Laughingthrush India, Myanmar

India, Myanmar

Geomalia heinrichi 21

Geomalia

Indonesia

Gerygone albofrontata 21 Chatham Islands Warbler New Zealand

Heteromyias cinereifrons 21 Grey-headed Robin Australia

Heterophasia gracilis 21 Grey Sibia China, India, Myanmar

Hypothymis helenae 21 Short-crested Monarch Philippines

Illadopsis rufescens 21 Rufous-winged Illadopsis Côte d'Ivoire, Ghana, Liberia, Senegal, Sierra Leone, Togo Kupeornis chapini <sup>21</sup> Chapin's Mountain-babbler Zaire

Kupeornis rufocinctus 21 Red-collared Mountain-babbler Rwanda, Zaire

Leptopoecile elegans 21 Crested Tit-warbler China

Lioptilus nigricapillus 21 Bush Blackcap South Africa

Luscinia pectardens 21 Firethroat China. \* Bangladesh, India

Macronous kelleyi 21 Grey-faced Tit-babbler Laos, Viet Nam

Malacopteron albogulare 21 Grey-breasted Babbler Brunei, Indonesia, Malaysia

Malurus coronatus 21 Purple-crowned Fairywren Australia

Malurus grayi 21 Broad-billed Fairywren Indonesia, Papua New Guinea

Mayrornis schistaceus 21 Vanikoro Monarch Solomon Islands

Megalurulus whitneyi 21 Guadalcanal Thicketbird Solomon Islands, Vanuatu

Microeca hemixantha 21 Golden-bellied Flyrobin Indonesia

Monarcha browni 21 Kolombangara Monarch Solomon Islands

Monarcha castus 21 Loetoe Monarch Indonesia

Monarcha godeffroyi <sup>21</sup>
Yap Monarch
Federated States of Micronesia

Monarcha infelix 21 Manus Monarch Papua New Guinea

Monarcha leucurus 21 White-tailed Monarch Indonesia

Monarcha loricatus <sup>21</sup>
Black-tipped Monarch
Indonesia

Monarcha mundus 21 Black-bibbed Monarch Indonesia Muscicapa muttui 21
Brown-breasted Flycatcher
China, India. \* Myanmar, Sri Lanka,
Thailand

Myadestes elisabeth 21 Cuban Solitaire Cuba

Myiagra atra 21 Biak Flycatcher Indonesia

Myiagra cervinicauda 21 Ochre-tailed Flycatcher Solomon Islands

Myiophonus robinsoni <sup>21</sup> Malayan Whistling-thrush Malaysia

Namibornis herero 21 Herero Chat Angola, Namibia

Napothera macrodactyla 21 Large Wren-babbler Indonesia, Malaysia, Thailand

Napothera marmorata 21 Marbled Wren-babbler Indonesia, Malaysia

Neomixis flavoviridis 21 Wedge-tailed Jery Madagascar

Nesillas mariae 21 Moheli Brush-warbler Comoros

Nesocichla eremita 21 Tristan Thrush St Helena (Tristan da Cunha)

Niltava davidi <sup>21</sup>
Fujian Niltava
China, Laos, Viet Nam. \* Hong
Kong, Thailand

Oreoscopus gutturalis 21
Fernwren
Australia

Origma solitaria 21 Origma Australia

Orthotomus nigriceps 21 Black-headed Tailorbird Philippines

Orthotomus samarensis 21 Yellow-breasted Tailorbird Philippines

Pachycephala implicata 21 Hooded Whistler Papua New Guinea, Solomon Islands

Pachycephala jacquinoti 21 Tongan Whistler Tonga Pachycephala meyeri 21 Vogelkop Whistler Indonesia

Pachycephala orpheus 21 Fawn-breasted Whistler Indonesia

Paradoxornis atrosuperciliaris 21 Black-browed Parrotbill Bangladesh, China, India, Laos, Myanmar, Thailand

Paradoxornis brunneus 21 Brown-winged Parrotbill China, Myanmar

Paradoxornis conspicillatus 21 Spectacled Parrotbill China

Paradoxornis heudei 21 Reed Parrotbill China, Russia

Paradoxornis ruficeps 21 Rufous-headed Parrotbill Bangladesh, Bhutan, China, India, Laos, Myanmar, Viet Nam

Phoenicurus alaschanicus 21 Ala Shan Redstart

Ala Shan Redstari China

Phylloscopus cantator <sup>21</sup>
Yellow-vented Warbler
Bangladesh, Bhutan, India. \* China,
India, Laos, Myanmar, Nepal,
Thailand

Phylloscopus makirensis 21 San Cristobal Leaf-warbler Solomon Islands

Phylloscopus tytleri <sup>21</sup>
Tytler's Leaf-warbler
Afghanistan, India, Nepal, Pakistan

Platysteira albifrons 21 White-fronted Wattle-eye Angola

Pnoepyga immaculata 21 Nepal Wren-babbler Nepal

Polioptila lactea 21 Creamy-bellied Gnatcatcher Argentina, Brazil, Paraguay

Polioptila lembeyei 21 Cuban Gnatcatcher Cuba

Prinia cinereocapilla 21 Grey-crowned Prinia Bhutan, India, Nepal

Pseudobias wardi <sup>21</sup> Ward's Flycatcher Madagascar

Pseudocossyphus sharpei <sup>21</sup> Forest Rock-thrush Madagascar Pteruthius rufiventer 21 Black-headed Shrike-babbler Bhutan, China, India, Myanmar, Nepal, Viet Nam

Ptilocichla leucogrammica 21 Bornean Wren-babbler Brunei, Indonesia, Malaysia

Ptilocichla mindanensis 21 Striated Wren-babbler Philippines

Randia pseudozosterops 21 Rand's Warbler Madagascar

Rhinomyias colonus 21 Henna-tailed Jungle-flycatcher Indonesia

Rhinomyias oscillans 21 Russet-backed Jungle-flycatcher Indonesia

Rhipidura euryura 21 White-bellied Fantail Indonesia

Rhipidura fuscorufa 21 Cinnamon-tailed Fantail Indonesia

Rhipidura opistherythra 21 Long-tailed Fantail Indonesia

Rhipidura personata 21 Kadavu Fantail Fiji

Rhipidura superflua 21 Tawny-backed Fantail Indonesia

Rhipidura tenebrosa 21 Dusky Fantail Solomon Islands

Rimator malacoptilus <sup>21</sup>
Long-billed Wren-babbler
Bhutan, India, Indonesia, Myanmar,
Viet Nam

Saxicola bifasciata 21 Buff-streaked Chat South Africa

Saxicola dacotiae 21 Fuerteventura Chat Spain (Canary Is)

Saxicola gutturalis 21 White-bellied Bushchat Indonesia

Saxicola jerdoni <sup>21</sup> Jerdon's Bushchat Bangladesh, China, India, Laos, Myanmar, Thailand, Viet Nam

Schoenicola platyura 21 Broad-tailed Grassbird India Spelaeornis formosus 21 Spotted Wren-babbler Bangladesh, Bhutan, China, India, Myanmar

Sphenocichla humei <sup>21</sup>
Wedge-billed Wren-babbler
China, India, Myanmar
Stachyris capitalis <sup>21</sup>

Rusty-crowned Babbler Philippines

Stachyris dennistouni 21 Golden-crowned Babbler Philippines

Stachyris plateni 21 Pygmy Babbler Philippines

Stachyris whiteheadi 21 Chestnut-faced Babbler Philippines

Sylvietta philippae <sup>21</sup> Short-billed Crombec Ethiopia, Somalia

Tarsiger hyperythrus 21 Rufous-breasted Bush-robin Bhutan, China, India, Nepal. \* Myanmar

Terpsiphone atrocaudata 21
Japanese Paradise-flycatcher
Japan, North Korea, Philippines,
South Korea. \* China, Indonesia,
Laos, Malaysia, Philippines, Taiwan,
Thailand, Viet Nam

Terpsiphone bedfordi <sup>21</sup> Bedford's Paradise-flycatcher Zaire

Terpsiphone cinnamomea 21 Rufous Paradise-flycatcher Philippines

Terpsiphone cyanescens 21 Blue Paradise-flycatcher Philippines

Tickellia hodgsoni 21 Broad-billed Warbler China, India, Laos, Myanmar, Nepal, Viet Nam

Trichastoma bicolar 21
Ferruginous Babbler
Brunei, Indonesia, Malaysia,
Myanmar, Thailand

Trichastoma rostratum <sup>21</sup>
White-chested Babbler
Brunei, Indonesia, Malaysia,
Myanmar, Thailand

Turdoides altirostris 21
Iraq Babbler
Iran, Iraq

Turdoides longirostris 21 Slender-billed Babbler India, Myanmar, Nepal



Turdus dissimilis 21 Black-breasted Thrush China, India, Myanmar, Viet Nam. \* Bangladesh, Thailand

Turdus graysoni 21 Grayson's Thrush Mexico

Turdus haplochrous 21 Unicoloured Thrush Bolivia

Turdus mupinensis 21 Chinese Thrush China

Turdus olivaceofuscus 21 São Tomé Thrush São Tomé & Príncipe

Urosphena subulata 21 Timor Stubtail Indonesia

Xenocopsychus ansorgei 21

Angola Cave-chat Angola Xiphirhynchus superciliaris 21

Xiphirhynchus superciliaris 21 Slender-billed Scimitar-babbler Bangladesh, Bhutan, China, India, Myanmar, Nepal, Viet Nam

Yuhina humilis 21 Burmese Yuhina Myanmar, Thailand

Zoothera crossleyi 21 Crossley's Ground-thrush Cameroon, Nigeria

Zoothera erythronota 21 Red-backed Thrush Indonesia

Zoothera everetti 21 Everett's Thrush Malaysia

Zoothera machiki 21 Fawn-breasted Thrush Indonesia

Zoothera margaretae 21 Makira Thrush Solomon Islands

Zoothera monticola 21 Long-billed Thrush Bangladesh, Bhutan, India, Myanmar, Nepal, Viet Nam

Zoothera oberlaenderi 21 Forest Ground-thrush Uganda, Zaire

Zoothera peronii 21 Orange-banded Thrush Indonesia

Zoothera schistacea 21 Slaty-backed Thrush Indonesia Zoothera spiloptera 21 Spot-winged Thrush Sri Lanka

Zoothera talaseae 21 New Britain Thrush Papua New Guinea

Zoothera tanganjicae 21 Kivu Ground-thrush Uganda, Zaire

Zoothera wardii 21 Pied Thrush Bhutan, India, Nepal. \* India, Sri Lanka

Family AEGITHALIDAE

Aegithalos fuliginosus 21 White-necklaced Tit China

Aegithalos niveogularis 21 White-throated Tit India, Nepal, Pakistan

Family PARIDAE

Parus fringillinus 21 Red-throated Tit Kenya, Tanzania

Parus holsti<sup>21</sup> Yellow Tit Taiwan

France

Parus semilarvatus 21 White-fronted Tit Philippines

Family SITTIDAE

Sitta villosa <sup>21</sup>
Snowy-browed Nuthatch
China
Sitta whiteheadi <sup>21</sup>
Corsican Nuthatch

Family RHABDORNITHIDAE

Rhabdornis grandis <sup>21</sup> Long-billed Rhabdornis Philippines

Family DICAEIDAE

Dicaeum anthonyi <sup>21</sup> Flame-crowned Flowerpecker Philippines

Dicaeum everetti <sup>21</sup> Brown-backed Flowerpecker Indonesia, Malaysia

Dicaeum vincens 21 White-throated Flowerpecker Sri Lanka Family NECTARINIDAE

Aethopyga boltoni 21 Apo Sunbird Philippines

Anthreptes reichenowi 21 Plain-backed Sunbird Kenya, Mozambique, South Africa, Tanzania. Zimbabwe

Arachnothera clarae <sup>21</sup> Naked-faced Spiderhunter Philippines

Nectarinia loveridgei 21 Loveridge's Sunbird Tanzania

Nectarinia moreaui 21 Moreau's Sunbird Tanzania

Nectarinia neergaardi 21 Neergaard's Sunbird Mozambique, South Africa

Nectarinia pembae 21 Pemba Sunbird Tanzania

Nectarinia ursulae 21 Ursula's Sunbird Cameroon, Equatorial Guinea

Family ZOSTEROPIDAE

Heleia muelleri 21 Spot-breasted White-eye Indonesia

Lophozosterops dohertyi 21 Crested White-eye Indonesia

Megazosterops palauensis 21 Giant White-eye Palau

Rukia longirostra <sup>21</sup> Long-billed White-eye Federated States of Micronesia

Woodfordia lacertosa 21 Sanford's White-eye Solomon Islands

Zosterops anomalus 21 Lemon-throated White-eye Indonesia

Zosterops consobrinorum 21 Pale-bellied White-eye Indonesia

Zosterops flavus 21 Javan White-eye Indonesia, Malaysia

Zosterops grayi<sup>21</sup>
Pearl-bellied White-eye
Indonesia

Zosterops hypolais 21 Plain White-eye Federated States of Micronesia

Zosterops kuehni 21 Ambon Yellow White-eye Indonesia

Zosterops mysorensis 21 Biak White-eye Indonesia

Zosterops natalis 21 Christmas Island White-eye Christmas Island

Zosterops rennellianus 21 Rennell White-eye Solomon Islands

Zosterops saypani<sup>21</sup> Saipan Bridled White-eye Northern Marianas

Zosterops uropygialis 21 Golden-bellied White-eye Indonesia

Zosterops vaughani<sup>21</sup> Pemba White-eye Tanzania

# Family MELIPHAGIDAE

Lichenostomus frenatus <sup>21</sup> Bridled Honeyeater Australia

Lichmera deningeri 21 Buru Honeyeater Indonesia

Melidectes leucostephes <sup>21</sup> Vogelkop Melidectes Indonesia

Meliphaga reticulata 21 Streaky-breasted Honeyeater Indonesia

Myzomela vulnerata 21 Red-rumped Myzomela Indonesia

Philemon inornatus 21 Plain Friarbird Indonesia

Xanthotis provocator<sup>21</sup> Kadavu Honeyeater Fiji

#### Family EMBERIZIDAE

Acanthidops bairdii 21 Peg-billed Finch Costa Rica, Panama

Aimophila notosticta 21 Oaxaca Sparrow Mexico

Aimophila sumichrasti<sup>21</sup> Cinnamon-tailed Sparrow Mexico Amaurospiza moesta 21 Blackish-blue Seedeater Argentina, Brazil, Paraguay

Amaurospiza relicta 21 Slate-blue Seedeater Mexico

Ammodramus henslowii 21 Henslow's Sparrow Canada, USA

Atlapetes fuscoolivaceus 21 Dusky-headed Brush-finch Colombia

Atlapetes leucopis 21
White-rimmed Brush-finch
Colombia, Ecuador

Atlapetes rufigenis 21 Rufous-eared Brush-finch Peru

Bangsia arcaei 21 Blue-and-gold Tanager Costa Rica, Panama

Camarhynchus pauper 21 Medium Tree-finch Ecuador

Catamenia oreophila 21 Santa Marta Seedeater Colombia

Charitospiza eucosma 21 Coal-crested Finch Argentina, Brazil

Conothraupis speculigera 21 Black-and-white Tanager Ecuador, Peru

Cypsnagra hirundinacea 21 White-rumped Tanager Bolivia, Brazil, Paraguay

Dacnis albiventris <sup>21</sup>
White-bellied Dacnis
Brazil, Colombia, Ecuador, Peru,
Venezuela

Dacnis viguieri 21 Viridian Dacnis Colombia, Panama

Diglossa gloriosissima<sup>21</sup> Chestnut-bellied Flower-piercer Colombia

Emberiza cineracea 21
Cinereous Bunting
Greece, Iran, Turkey. \* Bahrain,
Egypt, Eritrea, Ethiopia, Israel,
Jordan, Kuwait, Lebanon, Saudi
Arabia, Sudan, Syria, United Arab
Emirates, Yemen

Emberiza koslowi 21 Tibetan Bunting China Emberiza yessoensis <sup>21</sup>
Ochre-rumped Bunting
China, Japan, Russia \* China, North
Korea, South Korea

Emberizoides ypiranganus <sup>21</sup> Grey-cheeked Grass-finch Argentina, Bolivia, Paraguay

Embernagra longicauda 21 Pale-throated Pampa-finch Brazil

Euphonia chalybea 21 Green-chinned Euphonia Argentina, Brazil, Paraguay

Habia gutturalis 21 Sooty Ant-tanager Colombia

Hemispingus rufosuperciliaris 21 Rufous-browed Hemispingus Ecuador, Peru

Incaspiza ortizi 21 Grey-winged Inca-finch Peru

Incaspiza watkinsi 21 Little Inca-finch Peru

Iridosornis porphyrocephala 21 Purplish-mantled Tanager Colombia, Ecuador

Latoucheornis siemsseni 21 Slaty Bunting China

Melanodera melanodera <sup>21</sup> Canary-winged Finch Argentina, Chile, Falkland Islands

Melanospiza richardsoni 21 St Lucia Black Finch St Lucia

Neothraupis fasciata 21 White-banded Tanager Bolivia, Brazil, Paraguay

Orchesticus abeillei 21 Brown Tanager Brazil

Oreomanes fraseri<sup>21</sup>
Giant Conebill
Bolivia, Colombia, Ecuador, Peru

Oryzoborus crassirostris <sup>21</sup> Large-billed Seed-finch Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela

Oryzoborus maximiliani 21
Great-billed Seed-finch
Brazil, French Guiana, Trinidad and
Tobago, Venezuela

Passerina rositae 21 Rose-bellied Bunting Mexico



Poospiza cinerea 21 Cinereous Warbling-finch Brazil

Porphyrospiza caerulescens 21 Yellow-billed Blue Finch Bolivia, Brazil

Saltator cinctus<sup>21</sup> Masked Saltator Ecuador, Peru

Saltator maxillosus 21 Thick-billed Saltator Argentina, Brazil, Paraguay

Sicalis luteocephala 21 Citron-headed Yellow-finch Bolivia

Sporophila cinnamomea 21 Chestnut Seedeater Argentina, Brazil, Paraguay

Sporophila hypochroma 21 Grey-and-chestnut Seedeater Argentina, Bolivia, Brazil, Paraguay

Sporophila melanogaster 21
Black-bellied Seedeater
Brazil

Sporophila ruficollis 21
Dark-throated Seedeater
Argentina, Bolivia, Brazil, Paraguay,
Uruguay

Tangara fucosa 21 Green-naped Tanager Panama

Tangara johannae 21 Blue-whiskered Tanager Colombia, Ecuador

Tangara phillipsi 21 Sira Tanager Peru

Tangara varia 21 Dotted Tanager Brazil, French Guiana, Suriname, Venezuela

Thraupis cyanoptera 21
Azure-shouldered Tanager
Brazil

Xenodacnis parina 21 Tit-like Dacnis Ecuador, Peru

# Family PARULIDAE

Basileuterus basilicus 21 Santa Marta Warbler Colombia

Basileuterus cinereicollis 21 Grey-throated Warbler Colombia, Venezuela

Basileuterus conspicillatus 21 White-lored Warbler Colombia Basileuterus ignotus 21 Pirre Warbler Colombia, Panama

Conirostrum margaritae 21
Pearly-breasted Conebill
Brazil, Peru

Dendroica angelae 21 Elfin-woods Warbler Puerto Rico

Dendroica vitellina 21 Vitelline Warbler Cayman Islands, Honduras

Ergaticus versicolor 21 Pink-headed Warbler Guatemala, Mexico

Geothlypis flavovelata 21 Altamira Yellowthroat Mexico

Myioborus albifacies 21 White-faced Whitestart Venezuela

Vermivora crissalis 21 Colima Warbler Mexico, USA

# Family DREPANIDIDAE

Paroreomyza montana 21 Maui Alauahio USA

# Family VIREONIDAE

Vireo brevipennis 21 Slaty Vireo Mexico Vireo nelsoni 21

Vireo nelsoni 21 Dwarf Vireo Mexico

Vireo osburni 21 Blue Mountain Vireo Jamaica

Vireolanius melitophrys <sup>21</sup> Chestnut-sided Shrike-vireo Guatemala, Mexico

#### Family ICTERIDAE

Icterus laudabilis 21 St Lucia Oriole St Lucia

Icterus oberi <sup>21</sup>
Montserrat Oriole
Montserrat

Macroagelaius subalaris 21 Mountain Grackle Colombia

Nesopsar nigerrimus 21
Jamaican Blackbird
Jamaica

Quiscalus nicaraguensis 21 Nicaraguan Grackle Costa Rica, Nicaragua

#### Family FRINGILLIDAE

Carduelis atriceps 21 Black-capped Siskin Guatemala, Mexico

Carduelis monguilloti 21 Vietnam Greenfinch Viet Nam

Pyrrhula aurantiaca 21 Orange Bullfinch India, Pakistan

Pyrrhula leucogenis 21 White-cheeked Bullfinch Philippines

Serinus leucopterus 21 Protea Canary South Africa

Serinus melanochrous 21 Kipengere Seedeater Tanzania

Serinus symonsi 21 Drakensberg Siskin Lesotho, South Africa

Serinus totta 21 Cape Siskin South Africa

## Family ESTRILDIDAE

Estrilda thomensis 21 Cinderella Waxbill Angola, Namibia

Heteromunia pectoralis 21 Pictorella Munia Australia

Lagonosticta virata 21 Mali Firefinch Mali

Lonchura flaviprymna 21 Yellow-rumped Munia Australia

Lonchura nevermanni 21 Grey-crowned Munia Indonesia, Papua New Guinea

Lonchura stygia 21 Black Munia Indonesia, Papua New Guinea

Padda fuscata 21 Timor Sparrow Indonesia

Stagonopleura oculata 21
Red-eared Firetail
Australia

#### Family PLOCEIDAE

Euplectes aureus 21 Golden-backed Bishop Angola

Euplectes jacksoni <sup>21</sup>
Jackson's Widowbird
Kenya, Tanzania

Ploceus hypoxanthus 21 Asian Golden Weaver Cambodia, Indonesia, Laos, Myanmar, Thailand, Viet Nam

Ploceus spekeoides 21 Fox's Weaver Uganda

#### Family STURNIDAE

Acridotheres albocinctus 21 Collared Myna China, India, Myanmar

Aplonis crassa 21 Tanimbar Starling Indonesia

Aplonis insularis 21 Rennell Starling Solomon Islands

Aplonis mystacea 21
Yellow-eyed Starling
Indonesia, Papua New Guinea

Aplonis zelandica 21
Rusty-winged Starling
Solomon Islands, Vanuatu

Basilornis galeatus 21
Helmeted Myna
Indonesia

Basilornis miranda 21

Apo Myna Philippines

Lamprotornis cupreocauda <sup>21</sup> Copper-tailed Glossy-starling Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone

Saroglossa spiloptera 21 Spot-winged Starling India, Nepal. \* Bangladesh, India, Myanmar, Nepal, Thailand

Streptocitta albertinae 21 Bare-eyed Myna Indonesia

Sturnus erythropygius 21 White-headed Starling India

Sturnus melanopterus 21 Black-winged Starling Indonesia

Sturnus philippensis <sup>21</sup>
Chestnut-cheeked Starling
Japan, Russia. \* China, Indonesia,
Japan, Philippines, Taiwan

Sturnus senex 21 White-faced Starling Sri Lanka

Sturnus sericeus 21 Red-billed Starling China. \* Hong Kong, Viet Nam

# Family ORIOLIDAE

Oriolus hosii 21 Black Oriole Malaysia

# Family DICRURIDAE

Dicrurus aldabranus <sup>21</sup> Aldabra Drongo Seychelles

Dicrurus andamanensis 21 Andaman Drongo India, Myanmar

Dicrurus modestus 21 Príncipe Drongo São Tomé & Príncipe

Dicrurus sumatranus 21 Sumatran Drongo Indonesia

#### Family PTILONORHYNCHIDAE

Ailuroedus dentirostris 21 Tooth-billed Catbird Australia

Amblyornis flavifrons 21
Golden-fronted Bowerbird
Indonesia

#### Family PARADISAEIDAE

Astrapia nigra 21 Arfak Astrapia Indonesia

Cicinnurus respublica 21 Wilson's Bird-of-paradise Indonesia

Epimachus bruijnii <sup>21</sup> Pale-billed Sicklebill Indonesia, Papua New Guinea

Paradigalla carunculata 21 Long-tailed Paradigalla Indonesia

Paradisaea guilielmi 21 Emperor Bird-of-paradise Papua New Guinea

Paradisaea rubra 21 Red Bird-of-paradise Indonesia

Ptiloris paradiseus 21 Paradise Riflebird Australia Semioptera wallacii 21 Standardwing Indonesia

#### Family CORVIDAE

Cissa hypoleuca 21 Yellow-breasted Magpie China, Laos, Thailand, Viet Nam

Cissa thalassina 21 Short-tailed Magpie Indonesia, Malaysia

Corvus fuscicapillus 21 Brown-headed Crow Indonesia

Corvus meeki 21 Bougainville Crow Papua New Guinea, Solomon Islands

Corvus palmarum 21 Palm Crow Cuba, Dominican Republic, Haiti

Corvus woodfordi 21 White-billed Crow Solomon Islands

Cyanocorax caeruleus 21
Azure Jay
Argentina, Brazil

Cyanocorax dickeyi 21 Tufted Jay Mexico

Cyanolyca pulchra <sup>21</sup> Beautiful Jay Colombia, Ecuador

Dendrocitta bayleyi 21
Andaman Treepie
India

Dendrocitta leucogastra 21 White-bellied Treepie India

Platysmurus leucopterus <sup>21</sup> Black Magpie Brunei, Indonesia, Malaysia, Myanmar, Thailand

Urocissa whiteheadi 21 White-winged Magpie China, Laos, Viet Nam

#### Class REPTILIA

Order SAURIA

Family ANGUIDAE

Diploglossus warreni 126

Family CHAMAELEONIDAE

Bradypodion nemorale 185
Zululand Dwarf Chamaeleon
South Africa



Bradypodion thamnobates 185
Natal Midland Dwarf Chamaeleon
South Africa

#### Family CORDYLIDAE

Cordylus lawrencei 185 Lawrence's Girdled Lizard South Africa

Gerrhosaurus typicus 185 Namaqua Plated Lizard South Africa

Platysaurus relictus 185 Soutpansberg Flat Lizard South Africa

Pseudocordylus langi 185 Lang's Crag Lizard Lesotho, South Africa

Pseudocordylus spinosus 185 Spiny Crag Lizard South Africa

# Family GEKKONIDAE

Afroedura hawequensis 185 Hawequa Flat Gecko South Africa

Homopholis mulleri 185 Muller's Velvet Gecko South Africa

Hoplodactylus kahutarae 14 Black-eyed Gecko New Zealand

Hoplodactylus rakiurae 14 Harlequin Gecko New Zealand

Phelsuma ocellata 185 Namaqua Day Gecko Namibia, South Africa

Phyllodactylus microlepidotus 185 Small-scaled Leaf-toed Gecko South Africa

Underwoodisaurus sphyurus 14 Australia

# Family LACERTIDAE

Lacerta rupicola 185
Soutpansberg Rock Lizard
South Africa

Lacerta schreiberi 65 Portugal, Spain

#### Family PYGOPODIDAE

Aprasia pseudopulchella 14 Flinders Ranges Worm-lizard Australia

# Family SCINCIDAE

Coeranoscincus reticulatus 14 Three-toed Snake-tooth Skink Australia

Eumeces kishinouyei 185 Kishinoue's Giant Skink Japan (Nansei-shoto)

Oligosoma fallai 14 Falla's Skink New Zealand

Oligosoma infrapunctatum 14 Speckled Skink New Zealand

Scelotes gronovii 185 Gronovi's Dwarf Burrowing Skink South Africa

#### Order SERPENTES

#### Family BOIDAE

Epicrates angulifer 58 Cuban Boa Cuba

Epicrates inornatus 174
Puerto Rican Boa
Puerto Rico

Python molurus 185
Indian Python
Bangladesh, Cambodia, China, Hong
Kong, India, Indonesia, Laos,
Myanmar, Nepal, Pakistan, Sri
Lanka, Thailand, Viet Nam

# Family COLUBRIDAE

Homoroselaps dorsalis 185 Striped Harlequin Snake South Africa, Swaziland

Lamprophis fuscus 185
Yellow-bellied House Snake
South Africa

Lamprophis swazicus 185 Swazi Rock Snake South Africa, Swaziland

Opheodrys herminae 185 Sakashima Green Snake Japan (Nansei-shoto)

#### Family ELAPIDAE

Elapognathus minor 14 Short-nosed Snake Australia

Simoselaps calonotus 14
Black-striped Snake
Australia

#### Order TESTUDINES

#### Family CHELIDAE

Acanthochelys macrocephala 176
Pantanal Swamp Turtle
Argentina, Bolivia, Brazil, Paraguay

Acanthochelys radiolata 176
Brazilian Radiolated Swamp Turtle
Brazil

Acanthochelys spixii 176
Spiny-neck Turtle
Argentina, Brazil, Paraguay?,
Uruguay

Chelodina oblonga 176
Narrow-breasted Snake-necked
Turtle
Australia

Phrynops rufipes 176
Red Side-necked Turtle
Brazil, Colombia, Peru?

Phrynops vanderhaegei 176 Vanderhaege's Toad-headed Turtle Argentina, Bolivia?, Brazil, Paraguay, Uruguay?

# Family EMYDIDAE

Cuora amboinensis 176
South Asian Box Turtle
Bangladesh, Brunei, Cambodia?,
India, Indonesia, Malaysia,
Myanmar, Philippines, Thailand,
Viet Nam

Cuora galbinifrons 176 Indochinese Box Turtle China, Viet Nam

Emydoidea blandingii 176 Blanding's Turtle Canada, USA

Emys orbicularis 176 European Pond Turtle

Albania, Algeria, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus?, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Kazakhstan, Latvia, Liechtenstein?, Lithuania, Macedonia, Moldova, Monaco?, Morocco, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey, Turkmenistan, Ukraine, Yugoslavia

Geoclemys hamiltonii <sup>176</sup> Spotted Pond Turtle Bangladesh, India, Nepal?, Pakistan

Graptemys barbouri 176
Barbour's Map Turtle
USA

Graptemys ernsti 176 Escambia Map Turtle USA

Graptemys gibbonsi 176 Pascagoula Map Turtle USA

Graptemys nigrinoda 176
Black-knobbed Map Turtle
USA
[R. Tombigbee-Black
Warrior-Alabama]

Graptemys versa 176
Texas Map Turtle
USA
[R. Colorado]

Hardella thurjii <sup>176</sup> Crowned River Turtle Bangladesh, India?, Nepal, Pakistan

Heosemys grandis 176 Giant Asian Pond Turtle Cambodia, Malaysia, Myanmar, Thailand, Viet Nam

Kachuga dhongoka 176 Three-striped Roof Turtle Bangladesh, India, Nepal

Malaclemys terrapin 176 Diamondback Terrapin USA

Morenia ocellata 176 Burmese Eyed Turtle Myanmar

Morenia petersi 176 Indian Eyed Turtle Bangladesh, India, Nepal?

Ocadia sinensis <sup>176</sup> Chinese Stripe-necked Turtle China, Laos?, Taiwan, Viet Nam

Orlitia borneensis 176 Malaysian Giant Turtle Indonesia, Malaysia

Pseudemys gorzugi 176 Rio Grande Cooter Mexico, USA

Pseudemys rubriventris 176 American Red-bellied Turtle USA

Rhinoclemmys annulata 176
Brown Wood Turtle
Colombia, Costa Rica, Ecuador,
Honduras, Nicaragua, Panama

Rhinoclemmys funerea 176
Black Wood Turtle
Costa Rica, Honduras, Nicaragua,
Panama

Rhinoclemmys nasuta 176 Large-nosed Wood Turtle Colombia, Ecuador Terrapene carolina 176 Common Box Turtle Mexico, USA

Terrapene ornata 176 Ornate Box Turtle Mexico, USA

Trachemys scripta 176
Common Slider
Belize, Colombia, Costa Rica,
El Salvador, France [int], Germany
[int], Guadeloupe [int], Guatemala,
Honduras, Israel [int], Mexico,
Netherlands [int], Nicaragua,
Panama, South Africa [int], USA,
Venezuela

Trachemys stejnegeri 176
Central Antillean Slider
Baharnas, Dominican Republic,
Haiti, Puerto Rico

#### Family KINOSTERNIDAE

Claudius angustatus 176 Narrow-bridged Musk Turtle Belize, Guatemala, Mexico

Kinosternon acutum 176
Tabasco Mud Turtle
Belize, Guatemala, Mexico

Kinosternon creaseri 176 Creaser's Mud Turtle Mexico

Kinosternon oaxacae 176
Oaxaca Mud Turtle
Mexico

Staurotypus salvinii 176 Giant Musk Turtle El Salvador, Guatemala, Mexico

Staurotypus triporcatus 176
Mexican Musk Turtle
Belize, Guatemala, Honduras,
Mexico

#### Family TESTUDINIDAE

Homopus signatus 30 Speckled Cape Tortoise Namibia?, South Africa

Kinixys natalensis 176
Natal Hinge-back Tortoise
Mozambique, South Africa,
Swaziland

Testudo hermanni 176
Albania, Austria, Bulgaria, France,
Greece, Italy, Macedonia, Malta
[int], Romania, Slovenia, Spain [int]
(Balearic Is), Turkey, Yugoslavia

#### Family TRIONYCHIDAE

Aspideretes leithii 176 Leith's Softshell Turtle India Cyclanorbis elegans 176 Nubian Flapshell Turtle Benin?, Chad, Ethiopia?, Ghana, Nigeria, Sudan, Togo

Cyclanorbis senegalensis <sup>176</sup> Senegal Flapshell Turtle Benin, Burkina Faso, Cameroon?, Chad, Côte d'Ivoire, Ethiopia?, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania?, Nigeria, Senegal, Sudan, Togo

Cycloderma frenatum 176
Zambezi Flapshell Turtle
Malawi, Mozambique, Tanzania,
Zimbabwe

Palea steindachneri 176
Wattle-necked Softshell Turtle
China, Mauritius [int], USA [int]
(Hawaiian Is), Viet Nam

# Class AMPHIBIA

Order ANURA

Family BUFONIDAE

Bufo retiformis 75 Sonoran Green Toad Mexico, USA

Capensibufo rosei 185 Cape Mountain Toad South Africa

Family HYLIDAE

Hyla andersonii 75 Pine Barrens Tree Frog USA

Hyla arborea 65
European Tree Frog
Albania, Armenia, Austria,
Azerbaijan, Belarus, Belgium,
Bosnia and Herzegovina, Bulgaria,
Croatia, Czech Republic, Denmark,
France, Georgia, Germany, Greece,
Hungary, Iran, Italy, Liechtenstein,
Lithuania, Luxembourg, Moldova,
Netherlands, Poland, Portugal,
Romania, Russia, Slovakia, Slovenia,
Spain, Sweden, Switzerland, Turkey,
Ukraine, United Kingdom? [int],
Yugoslavia

Litoria aurea 14
Green and Golden Bell Frog
Australia

Litoria brevipalmata 14
Green-thighed Frog
Australia



#### Family LEIOPELMATIDAE

Leiopelma archeyi 14 Archey's Frog New Zealand

#### Family MYOBATRACHIDAE

Adelotus brevis 14
Tusked Frog
Australia

Heleioporus albopunctatus 14 Western Spotted Frog Australia

Lechriodus fletcheri 14
Fletcher's Frog
Australia

Mixophyes fasciolatus 14 Great Barred Frog Australia

Pseudophryne australis 14
Red-crowned Toadlet
Australia

Pseudophryne bibronii 14
Bibron's Toadlet
Australia

#### Family RANIDAE

Anhydrophryne rattrayi 185 Hogsback Frog South Africa

Cacosternum capense 185
Cape Caco
South Africa

Rana dracomontana 185 Drakensberg Frog Lesotho, South Africa?

Rana latastei 65 Italian Agile Frog Croatia, Italy, Slovenia, Switzerland

#### Order CAUDATA

# Family PLETHODONTIDAE

Aneides aeneus 185 Green Salamander USA

Plethodon caddoensis 185 USA

Plethodon fourchensis 185 USA

Plethodon ouachitae 185 USA

Speleomantes genei 65
Sardinian or Brown Cave Salamander
Italy

Speleomantes imperialis 65
Italy

Speleomantes supramontes 65
Italy

# Family SALAMANDRIDAE

Mertensiella caucasica 65 Caucasian Salamander Georgia, Turkey

# Class CEPHALASPIDOMORPHI

# Order PETROMYZONTIFORMES

# Family PETROMYZONTIDAE

Eudontomyzon danfordi 185 Carpathian Brook Lamprey Austria?, Bosnia and Herzegovina?, Bulgaria, Croatia?, Czech Republic?, Hungary, Moldova?, Romania, Slovakia, Ukraine?, Yugoslavia [R. Danube]

Eudontomyzon vladykovi 185 Vladykov's Lamprey Austria?, Bulgaria?, Romania, Yugoslavia

# Lampetra fluviatilis 185 River Lamprey

Albania, Austria, Belgium, Czech Republic (ex?), Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, Luxembourg?, Netherlands, Norway, Poland, Portugal, Russia, Slovakia (ex?), Spain (ex?), Sweden, Switzerland (ex), United Kingdom

Lampetra hubbsi 75 Kern Brook Lamprey USA

Lampetra planeri 185 Brook Lamprey

Austria, Belgium, Bulgaria?, Czech Republic, Estonia, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, Luxembourg?, Netherlands, Norway, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, United Kingdom

# Class ACTINOPTERYGII

#### Order ACIPENSERIFORMES

### Family ACIPENSERIDAE

Acipenser oxyrinchus 170 Atlantic Sturgeon Canada, Mexico, USA [Atlantic (northwest, northwest, western central, western central)]

Acipenser transmontanus 170 White Sturgeon Canada, USA

#### Order OSTEOGLOSSIFORMES

#### Family OSTEOGLOSSIDAE

Scleropages leichhardti 179 Southern Saratoga Australia

# Family NOTOPTERIDAE

Chitala blanci 101 Cambodia, Thailand

# Order CYPRINIFORMES

# Family CYPRINIDAE

Barbus caninus 101 Italy, Switzerland

Barbus hospes 158 Namaquab Barb Namibia, South Africa

Barbus plebejus 101 Croatia, Italy, Slovenia, Switzerland

Barbus sclateri 185 Portugal, Spain

Barbus tyberinus 101 Italy

Capoeta pestai 185
Siraz Baligi
Turkey
[L. Beysehir, L. Egirdir]

Chalcalburnus belvica 185 Albania, Greece, Macedonia? [L. Prespa]

Chondrostoma genei 185 South European Nase Italy, Slovenia (ex)

Chondrostoma prespensis 185 Albania, Greece, Macedonia?

Cyprinella callitaenia 75
Bluestripe Shiner
USA
[R. Apalachicola]

Cyprinella monacha 75 Turquoise Shiner USA

Gila intermedia 75 Gila Chub Mexico, USA

Leuciscus lucumontis 185 Italy Macrhybopsis meeki 75 Sicklefin Chub USA

Notropis perpallidus 75 Colorless Shiner USA

Oregonichthys kalawatseti 75 Umpqua Chub USA

Pachychilon pictum 185
Albanian Roach
Albania, Greece, Yugoslavia

Phoxinellus pleurobipunctatus 185 Greece

Phoxinellus zeregii 185 Turkey

Phoxinus tennesseensis 75 Tennessee Dace USA

Pseudobarbus afer 158
Eastern Cape Redfin
South Africa

Pseudophoxinus stymphalicus 185 Dáska Greece

Rutilus macedonicus 185 Greece

#### Family COBITIDAE

Cobitis meridionalis 185 Albania?, Greece, Macedonia?

Cobitis paludica 185 Portugal, Spain

Misgurnis fossilis 101 Weatherfish

Austria, Belarus, Belgium, Bosnia and Herzegovina?, Bulgaria, Croatia, Czech Republic, Estonia, France, Germany, Hungary, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Switzerland, Ukraine, Yugoslavia

Sabanjewia larvata 185 Italian Loach Italy

#### Family CATOSTOMIDAE

Catostomus snyderi 75 Klamath Largescale Sucker USA

Cycleptus elongatus 15 Blue Sucker Mexico, USA

Moxostoma hamiltoni 185 Rustyside Sucker USA [R. Dan]

#### Order SILURIFORMES

Family ICTALURIDAE

Noturus munitus 75
Frecklebelly Madtom
USA

Noturus placidus 15 Neosho Madtom USA

# Family TRICHOMYCTERIDAE

Trichomycterus laucaensis 185 Chile

Trichomycterus rivulatus 185 Chile

# Order SALMONIFORMES

Family UMBRIDAE

Novumbra hubbsi 75 Olympic Mudminnow USA

# Family LEPIDOGALAXIIDAE

Lepidogalaxias salamandroides 179 Salmanderfish Australia

# Family GALAXIIDAE

Galaxias zebratus 158 Cape Galaxias South Africa

Galaxiella munda 179 Western Mud Minnow Australia

Galaxiella nigrostriata 179 Black-striped Minnow Australia

Neochanna apoda 113 Brown Mudfish New Zealand

# Order ATHERINIFORMES

Family ATHERINIDAE

Basilichthys australis 185 Chile

Cauque mauleanum 185 Chile

Craterocephalus centralis 179
Finke River Hardyhead
Australia

Craterocephalus helenae 179 Drysdale Hardyhead Australia Craterocephalus lentiginosus 179
Prince Regent Hardyhead

Prince Regent Hardyhead Australia

Melanotaenia gracilis 179 Slender Rainbowfish Australia

Melanotaenia pygmaea 179 Pygmy Rainbowfish Australia

Menidia conchorum 185 Key Silverside USA

# Order CYPRINODONTIFORMES

Family CYPRINODONTIDAE

Orestias laucaensis 185 Chile [R. Lauca]

# Family POECILIDAE

Gambusia senilis 15 Guayacon Pinto Mexico, USA

Poeciliopsis occidentalis 75 Charalito Mexico, USA

#### Order BELONIFORMES

Family HEMIRAMPHIDAE

Dermogenys megarramphus 101 Indonesia [Malili Lakes]

#### Order PERCIFORMES

Family SERRANIDAE

Epinephelus marginatus 91
Brown Grouper
[Atlantic (eastern central, southeast, southwest), Mediterranean and Black Seal

Paralabrax dewegeri <sup>1</sup> Meo Viejo

Venezuela
[Atlantic (western central)]

#### Family TERAPONTIDAE

Hephaestus epirrhinos 179 Long-nose Sooty Grunter Australia

Leiopotherapon aheneus 179
Fortesque Grunter
Australia



Leiopotherapon macrolepis 179 Large-scale Grunter Australia

Pingalla midgleyi 179 Midgley's Grunter Australia

Syncomistes kimberleyensis 179 Kimberley Grunter Australia

Syncomistes rastellus 179
Drysdale Grunter
Australia

# Family CENTRARCHIDAE

Micropterus notius 75 Suwannee Bass USA

# Family ELASSOMATIDAE

Elassoma boehlkei 75 Carolina Pygmy Sunfish USA

#### Family PERCIDAE

Etheostoma acuticeps 75 Sharphead Darter USA

Etheostoma cragini 75 Arkansas Darter USA [R. Arkansas]

Etheostoma kanawhae 75 Kanawha Darter

USA
[R. New]

Etheostoma luteovinctum 75 Redband Darter

USA
Etheostoma maculatum 75

Spotted Darter USA [R. Ohio]

Etheostoma osburni 75 Finescale Saddled Darter USA

[R. New]

Etheostoma rubrum 75

Bayou Darter USA

[R. Bayou Pierre and tributaries]

Percina macrocephala 75 Longhead Darter USA [R. Ohio]

Percina nasuta 75 Longnose Darter USA Percina uranidea 75 Stargazing Darter USA

# Family ELEOTRIDAE

Butis butis 158
Duckbill Sleeper
Mozambique, South Africa

Eleotris melanosoma 158
Broadhead Sleeper
Mozambique, South Africa

Hypseleotris dayi 158 Golden Sleeper South Africa

Hypseleotris ejuncida 179 Slender Gudgeon Australia

Hypseleotris kimberleyensis <sup>179</sup> Barnett River Gudgeon Australia

Hypseleotris regalis 179 Prince Regent Gudgeon Australia

Kimberleyeleotris hutchinsi 179 Mitchell Gudgeon Australia

Kimberleyeleotris notata 179 Drysdale Gudgeon Australia

# Family GOBIIDAE

Kei Goby

Croilia mossambica 158
Naked Goby
Mozambique, South Africa
Glossogobius biocellatus 158
Sleepy Goby

Mozambique, South Africa, Tanzania

Oligolepis keiensis 158

Mozambique, South Africa

Padogobius martensii 185

Croatia, Italy, Slovenia, Switzerland Papillogobius melanobranchus 158

Blackthroat Goby
Mozambique, South Africa

Papillogobius reichei 158
Tropical Sand Goby
Mozambique, South Africa, Tanzania

Priolepis robinsi | [Atlantic (western central)]

Redigobius bikolanus 158
Bigmouth Goby
Mozambique, South Africa

Redigobius dewaali 158 Checked Goby Mozambique, South Africa Sicydium stimpsoni 185 Oopu Nopili USA (Hawaiian Is)

Silhouettea sibayi 158 Sibayi Goby Mozambique, South Africa

Taenioides jacksoni 158
Bearded Eelgoby
South Africa

# Class ECHINOIDEA

#### Order ECHINOIDA

# Family ECHINIDAE

Echinus esculentus 185 European Edible Sea Urchin Belgium, Denmark, France, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom [Atlantic (northeast)]

# Class ARACHNIDA

# Order ARANEAE

Family THERAPHOSIDAE

Euathlus smithi 185 Red-kneed Tarantula Mexico

#### Class CRUSTACEA

#### Order ANOSTRACA

#### Family LINDERIELLIDAE

Linderiella occidentalis 95 California Linderiella USA

#### Class INSECTA

#### Order COLEOPTERA

# Family CARABIDAE

Carabus intricatus 185
Blue Ground Beetle
Albania, Belgium, Bulgaria, Czech
Republic, Denmark, France,
Germany, Greece, Hungary, Italy,
Netherlands, Poland, Romania,
Slovakia?, Sweden, Switzerland,
United Kingdom, Yugoslavia

#### Family CICINDELIDAE

Cicindela marginipennis 75 Cobblestone Tiger Beetle USA

# Family LUCANIDAE

Colophon izardi 18 South Africa

#### Order HOMOPTERA

# Family CICADIDAE

Magicicada cassini 185 Cassini Periodical Cicada USA

Magicicada septendecim 185 Decim Periodical Cicada Canada, USA

Magicicada septendecula 185 Decula Periodical Cicada USA

#### Order HYMENOPTERA

#### Family FORMICIDAE

Formica aquilonia 163
European Red Wood Ant
Austria, Belarus, Bulgaria, Finland,
France, Germany, Italy, Latvia,
Norway, Russia, Sweden,
Switzerland, United Kingdom,
Yugoslavia

Formica lugubris 163
European Red Wood Aut
Austria, Bulgaria, Finland, France,
Germany, Hungary, Ireland, Italy,
Norway, Romania, Russia, Slovakia,
Spain, Sweden, Switzerland, United
Kingdom, Yugoslavia

Formica polyctena <sup>163</sup>
European Red Wood Ant
Austria, Belgium, Bulgaria, Czech
Republic, Finland, France, Germany,
Hungary, Italy, Latvia, Lithuania,
Netherlands, Norway, Poland,
Romania, Russia, Slovakia, Spain,
Sweden, Switzerland, Ukraine,

Formica pratensis/nigricans 163 European Red Wood Ant

Yugoslavia

Austria, Belgium, Bulgaria, Czech Republic, Estonia, Finland, France, Georgia, Germany, Hungary, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

Formica rufa 163
European Red Wood Ant
Austria, Belarus, Belgium, Bulgaria,
Czech Republic, Denmark, Estonia,
Finland, France, Germany, Hungary,
Italy, Latvia, Lithuania,

Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

Formica uralensis 163

European Red Wood Ant Belarus, Denmark, Estonia, Finland, France, Germany, Kazakhstan, Latvia, Lithuania, Norway, Poland, Russia, Sweden, Switzerland, Ukraine

# Family SPHECIDAE

Tachysphex pechumani 102
Antennal-waving Wasp
USA

#### Order LEPIDOPTERA

#### Family HESPERIIDAE

Panoquina errans 185 Wandering Skipper Mexico, USA

# Family LYCAENIDAE

Chrysoritis oreas 75 Drakensburg Copper South Africa

Iolaus aphnaeoides 75 South Africa

Lepidochrysops bacchus 75 Wineland Blue South Africa

Lycaena dispar 75

Large Copper Armenia?, Austria, Azerbaijan?, Belarus?, Belgium, Bulgaria, Czech Republic, Estonia, Finland?, France, Georgia?, Germany, Greece, Hungary, Italy, Kazakhstan?, Latvia?, Lithuania, Luxembourg, Moldova?, Mongolia?, Netherlands, Poland, Romania, Russia, Slovakia, Switzerland, Turkey?, Ukraine, Yugoslavia

Maculinea alcon 75

Alcon Large Blue
Albania?, Austria, Belarus?,
Belgium, Bulgaria?, Czech
Republic?, Denmark, France,
Germany, Greece, Hungary, Italy,
Kazakhstan?, Lithuania, Moldova?,
Netherlands, Poland?, Romania,
Russia, Slovakia?, Spain, Sweden,
Switzerland, Turkey, Ukraine,
Yugoslavia

#### Maculinea arion 75

Large Blue

Albania?, Armenia?, Austria, Azerbaijan?, Belarus?, Belgium, Bulgaria?, China, Czech Republic, Denmark, Estonia?, Finland, France, Georgia?, Germany, Greece, Hungary?, Iran?, Italy, Japan?, Kazakhstan?, Latvia?, Lithuania?, Moldova?, Poland, Romania?, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom [re-int], Yugoslavia

#### Maculinea arionides 185

Greater Large Blue China, Japan, Russia

Maculinea nausithous 185

Dusky Large Blue

Armenia?, Austria, Azerbaijan?, Belarus?, Bulgaria, Czech Republic?, France, Georgia, Germany, Hungary, Kazakhstan?, Moldova?, Poland, Romania?, Russia, Spain, Switzerland, Ukraine, Yugoslavia

Maculinea teleius 185

Scarce Large Blue
Austria, Belgium, Czech Republic?,
France, Georgia?, Germany,
Hungary, Italy, Japan, Kazakhstan?,
Mongolia?, Poland, Russia, Spain?,
Switzerland, Ukraine, Yugoslavia

Poecilmitis aureus 75 South Africa

Thestor brachycerus 75 South Africa

#### Family NYMPHALIDAE

Anetia briarea 105 Lesser False Fritillary Cuba, Dominican Republic, Haiti

Auetia cubana 105 Salvin's Anetia Cuba

Anetia jaegeri <sup>105</sup> Jaeger's Anetia Dominican Republic, Haiti, Jamaica

Anetia pantheratus 105
False Fritillary
Cuba, Dominican Republic, Haiti

Danaus cleophile 105 Jamaican Monarch Dominican Republic, Haiti, Jamaica

Euploea blossomae 105 Schaus' Crow Philippines

Euploea gamelia 105 Javan Crow Indonesia



Euploea martinii 105 Sumatran Crow Indonesia

Euploea swainson 105 Swainson's Crow Indonesia, Philippines

Euploea tobleri 105
Tobler's Crow
Philippines
Idea iasonia 105
Ceylon Tree-nymph

Sri Lanka

Idea malabarica 105 Malabar Tree-Nymph India

Parantica albata 105
Zinken's Tiger
Indonesia

Parantica nilgiriensis 105 Nilgiri Tiger India

Parantica pseudomelaneus <sup>105</sup> Javan Tiger Indonesia Parantica taprobana <sup>105</sup>

Ceylon Tiger Sri Lanka Parantica tityoides 105 Sumatran Chocolate Tiger

Indonesia

Protoploea apatela 105

Protoploea apatela 103
Indonesia, Papua New Guinea

Family PAPILIONIDAE

Archon apollinaris 75
Armenia, Bulgaria, Greece, Iran, Iraq, Israel, Jordan, Lebanon, Romania, Syria, Turkey, Turkmenistan

Baronia brevicornis 75 Short-horned Baronia Mexico

Graphium mendana 75
Papua New Guinea, Solomon Islands

Luehdorfia japonica <sup>75</sup> Japanese Luehdorfia Japan

Ornithoptera chimaera 75 Chimaera Birdwing Indonesia, Papua New Guinea

Papilio benguetanus 75 Philippines

Papilio grosesmithi 75 Madagascar

Papilio himeros 75
Argentina, Brazil

Papilio manlius 75 Mauritius Papilio maraho 75 Taiwan

Papilio sjoestedti 75 Kilimanjaro Swallowtail Tanzania

Parides burchellanus 75 Brazil

Teinopalpus imperialis 75
Kaiser-I-Hind
Bhutan, China, India, Myanmar,
Nepal

Troides andromache 75 Indonesia?, Malaysia

Family SATYRIDAE

Coenonympha oedippus 185 False Ringlet

Austria, Belgium, France, Germany, Hungary, Italy, Japan, Kazakhstan?, Liechtenstein, Mongolia?, Poland, Russia, Slovakia, Spain, Switzerland, Ukraine

Erebia christi 185 Raetzer's Ringlet Italy, Switzerland

Order MANTODEA

Family MANTIDAE

Apteromantis aptera 185 Spain

Order ODONATA

Family AESHNIDAE

Aeshna viridis 123
Austria, Czech Republic?, Denmark, Estonia?, Finland, Germany, Hungary, Latvia?, Lithuania?, Netherlands, Poland, Russia, Slovakia?, Sweden, Yugoslavia?

Family CALOPTERYGIDAE

Calopteryx angustipennis 123 USA

Family COENAGRIONIDAE

Megalagrion nigrohamatum 123 Nigrohamatum Damselfly USA (Hawaiian Is)

Family CORDULIDAE

Antipodochlora braueri 123 New Zealand

Macromia margarita 123

Somatochlora calverti 123 Calverts' Emerald USA Somatochlora incurvata 123 Canada, USA

Somatochlora ozarkensis 123 USA

Family GOMPHIDAE

Gomphurus modestus 123 Gulf Clubtail USA

Gomphus diminutus 123 Diminutive Clubtail USA

Gomphus hodgesi 123 Hodges' Clubtail USA

Hylogomphus geminatus 123 Twin-striped Clubtail USA

Hylogomphus parvidens 123 USA

Ophiogomphus anomalus 123 Canada, USA

Ophiogomphus incurvatus 123 USA

Family SYNLESTIDAE

Chlorolestes draconicus 123 South Africa

Ecchlorolestes nylephtha 123 South Africa

Class MEROSTOMATA

Order XIPHOSURA

Family LIMULIDAE

Limulus polyphemus 185 Horseshoe Crab Canada, Mexico, USA

Class ONYCHOPHORA

Order ONYCHOPHORA

Family PERIPATIDAE

Plicatoperipatus jamaicensis 122 Jamaica

Class HIRUDINEA

Order ARHYNCHOBDELLAE

Family **HIRUDINIDAE** 

Hirudo medicinalis 185
Medicinal Leech
Albania, Armenia, Austria,
Azerbaijan?, Belarus?, Belgium,
Bulgaria, Czech Republic?,
Denmark, Estonia?, Finland, France,

Georgia, Germany, Greece, Hungary, Italy, Kazakhstan?, Latvia?, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

# Class OLIGOCHAETA

Order HAPLOTAXIDA

Family LUTODRILIDAE

Lutodrilus multivesiculatus 185 USA

# Class BIVALVIA

Order UNIONOIDA

Family UNIONIDAE

Actinonaias pectorosa 24 USA

Anodontoides radiatus 24 USA

Cyclonaias tuberculata 24 USA

Ellipsaria lineolata <sup>24</sup> USA

Elliptio ahenea 24

Elliptio angustata 24 USA

Elliptio congaraea 24 USA

Elliptio dariensis 24 USA

Elliptio downiei 24 USA

Elliptio folliculata 24 USA

Elliptio hopetonensis 24 USA

Elliptio lanceolata 24
Yellow Lance

Elliptio mcmichaeli 24 USA

USA

Elliptio producta 24

Elliptio shepardiana 24 Altamaha Lance USA

Fusconaia askewi 24 USA Fusconaia barnesiana 24 USA

Fusconaia lananensis 24

Fusconaia ozarkensis 24 USA

Fusconaia subrotunda 24 USA

Fusconaia succissa 24 USA

Lampsilis bracteata 24 USA

Lampsilis cardium 24 USA

Lampsilis fullerkati <sup>24</sup> Waccamaw Fatmucket USA

Lampsilis haddletoni 24 USA

Lampsilis ornata 24 USA

Lampsilis ovata 24 USA

Lampsilis perovalis 24 Orangenacre Mucket USA

Lampsilis satura 24 USA

Lampsilis splendida 24 USA

Lasmigona holstonia <sup>24</sup> Tennessee Heelsplitter USA

Lasmigona subviridis 24 Green Floater USA

Leptodea leptodon 24 Scaleshell

USA

Leptodea ochracea 24 USA

Lexingtonia dolabelloides 24 Slabside Pearlymussel USA

Ligumia nasuta 24 USA

Ligumia recta 24 USA

Medionidus conradicus 24 USA

Obovaria jacksoniana <sup>24</sup> USA

Obovaria rotulata 24 Round Ebonyshell USA Obovaria subrotunda 24 USA

Obovaria unicolor 24 USA

Plethobasus cyphyus 24 USA

Pleurobema beadleianum 24 USA

Pleurobema cordatum 25 USA

[R. Green, R. Ohio]

Pleurobema decisum <sup>24</sup> Southern Clubshell USA

Pleurobema pyriforme <sup>24</sup> Oval Pigtoe USA

Pleurobema riddellii 24 USA

Pleurobema rubrum <sup>24</sup> Pyramid Pigtoe USA [R. Green]

Pseudanodonta complanata 115
Austria, Belarus, Belgium, Bulgaria, Czech Republic, Estonia, Finland, Germany, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Norway, Poland, Romania, Russia, Slovakia, Sweden, Switzerland, Ukraine, United Kingdom

Ptychobranchus occidentalis 24 USA

Ptychobranchus subtentum 24

Pyganodon gibbosa 24 USA

Quadrula asperata 24 USA

Quadrula houstonensis 24 USA

Quadrula refulgens 24 USA

Quadrula rumphiana 24 USA

Quincuncina infucata 24 USA

Strophitus connasaugaensis 24 USA

Strophitus subvexus 24 USA

Unio crassus 115

Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Kazakhstan, Latvia, Liechtenstein,



Lithuania, Luxembourg, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Sweden, Switzerland, Ukraine

#### Order VENEROIDA

# Family SPHAERIDAE

Pisidium fultoni 115 Australia

# Class GASTROPODA

#### Order ARCHAEOGASTROPODA

# Family NERITIDAE

Neritilia manoeli 33 Angola, Cameroon, São Tomé & Príncipe

### Order BASOMMATOPHORA

#### Family ANCYLIDAE

Ancylus regularis 33 Ethiopia

Simulator consetti 138 Australia

# Family PLANORBIDAE

Biomphalaria angulosa 33 Malawi, Tanzania, Zambia

Biomphalaria salinarum 33 Angola, Namibia?

Bulinus barthi 33 Kenya, Tanzania

Bulinus browni 33 Kenya

Bulinus canescens 33 Angola, Zaire, Zambia

Bulinus cernicus 33 Mauritius

Bulinus crystallinus 33 Angola, Gabon

Bulinus hexaploidus 33 Ethiopia

Bulinus octaploidus 33 Ethiopia

#### Order MESOGASTROPODA

#### Family AMPULLARIDAE

Lanistes ciliatus 33 Kenya

Lanistes elliptus 33 Malawi, Mozambique, Zaire

Pila occidentalis 33 Angola, Namibia, Zambia

#### Family HYDROBIIDAE

Bythinella carinulata 26
France

Bythinella pupoides 26 France, Switzerland

Bythinella vesontiana 26

Bythiospeum elseri 79 Austria

Falniowskia neglectissimum 167 Poland, Slovakia

Fluviopupa gracilis 138 Australia

Fluviopupa ramsayi 138 Australia

Fonscochlea zeidleri 138 Australia

Hemistoma gemma 138 Australia

Moitessieria lineolata 26

Moitessieria rayi 26
France

Paladilhia hungarica 115 Hungary

Potamopyrgus oscitans 138 Australia

Trochidrobia punicea 138 Australia

Victodrobia victoriensis 138 Australia

# Family RANELLIDAE

Cymatium parthenopaeum 115 Italy

# Family THIARIDAE

Cleopatra grandidieri 33 Madagascar

Melanatria fluminea 33 Madagascar

Melanatria madagascarensis 33 Madagascar

#### Family VIVIPARIDAE

Viviparus acerosus 115 Austria, Bulgaria, Germany, Hungary, Romania, Slovakia

#### Order NEOGASTROPODA

# Family BUCCINIDAE

Ranella olearia 115 Italy

Ranella parthenopaeum 115 Italy

# Family MURICIDAE

Latiaxis babelis 128

#### Order STYLOMMATOPHORA

#### Family AGRIOLIMACIDAE

Deroceras vascoana 115 France, Spain

#### Family CAMAENIDAE

Amphidromus cognatus 99
Australia

Amplirhagada montalivetensis 160 Australia

Australia

Austrochloritis pusilla 165 Australia

Baccalena squamulosa 98 Australia

Baudinella baudinensis 160 Australia

Cooperconcha centralis 161 Australia

Craterodiscus pricei 165 Australia

Cristilabrum spectaculum 160 Australia

Cupedora broughami 161 Australia

Cupedora luteofusca 161 Australia

Cupedora marcidum 161 Australia

Cupedora sutilosa 161 Australia

Cupedora tomsetti 161 Australia

Glyptorhagada janaslini 161 Australia

Granulomelon grandituberculatum 98 Australia

Jacksonena delicata 165 Australia

Jacksonena rudis 165 Australia

Lacustrelix minor 161 Australia

Lacustrelix yerelinana 161 Australia

Meliobba shafferyi 165 Australia

Meridolum marshalli 161 Australia Mesodontrachia desmonda 98
Australia

Mesodontrachia fitzroyana 98 Australia

Ordtrachia australis 98 Australia

Ordtrachia septentrionalis 98 Australia

Papuexul bidwilli 165 Australia

Pleuroxia arcigerens 98 Australia

Pleuroxia italowiana 140 Australia

Posorites turneri 165 Australia

Semotrachia sublevata 99
Australia

Semotrachia winneckeana 98
Australia

Setobaudinia victoriana 98 Australia

Sphaerospira macleayi 165 Australia

Sphaerospira rockhamptonensis 165 Australia

Sphaerospira whartoni 165 Australia

Torresitrachia funium <sup>99</sup> Australia

# Family CHAROPIDAE

Allocharopa okeana 115 Australia

Allocharopa tarravillensis 115 Australia

Pillomena aemula 99

Roblinella agnewi 115 Australia

Setomedea nudicostata 165 Australia

#### Family CHONDRINIDAE

Solatopupa psarolena 26 France, Italy

#### Family CLAUSILIIDAE

Charpentieria diodon 115 Italy, Switzerland Muticaria macrostoma 152 Malta

# Family COCHLICOPIDAE

Cryptazeca vasconica 115 Spain

# Family DISCIDAE

Discus scutula 6 Spain (Canary Is)

# Family GEOMITRIDAE

Actinella actinophora 115 Portugal (Madeira)

Actinella carinofausta 115 Portugal (Madeira)

Actinella fausta 115 Portugal (Madeira)

Actinella giramica 115 Portugal (Madeira)

Actinella obserata 115 Portugal (Madeira)

Actinella robusta 115 Portugal (Madeira)

Spirorbula obtecta 115 Portugal (Madeira)

Spirorbula squalida 115 Portugal (Madeira)

# Family HELICIDAE

Allognathus graellsianus 115 Spain (Balearic Is)

Chilostoma cingulellum 115 Poland, Slovakia

Chilostoma rossmaessleri 115 Poland, Slovakia

Codringtonia acacrianica 118 Greece

Codringtonia codringtonii 115 Rock Snail

Cylindrus obtusus 115 Austria

Helix godetiana 118

Greece

Greece

Hemicycla berkeleyi 6 Spain (Canary Is)

Hemicycla mascaensis 6 Spain (Canary Is)

Iberus qualtieranus 115 Spain

Pseudocampylaea podocampylaea 115 Portugal (Madeira) Family

#### HELICODISCIDAE

Helicodiscus diadema 115 USA

Helicodiscus hexodon 115 USA

Family

# HELMINTHOGLYPTIDAE

Eremarionta morongoana 149 Morongo Desert Snail USA

Helminthoglypta mohaveana 149 Victorville Shoulderband USA

Sonorella allynsmithi 115 USA

Sonorella christenseni 115 USA

Sonorella eremita 115 Sax Xavier Talus Snail USA

Sonorella grahamensis 115 USA

Sonorella macrophallus 115 USA

Sonorella metcalfī 149 Franklin Mountain Talus Snail USA

Sonorella todseni 115 USA

# Family HYGROMIIDAE

Atenia quadrani 115 Spain

Cryptosaccus asturiensis 115 Spain

Helicella gasulli 115 Spain

Helicella orzai 115 Spain

Helicella striatitala 115 Spain

Helicella zaratei 115 Spain

Helicella zujarensis 115 Spain

Helicopsis conopsis 154
Morocco

Montserratina bofilliana 115 Spain

Oestophora ortizi 115 Spain

Plentusia vendia 115 Spain

Pyrenaeania cotiellae 115 Spain



Pyrenaearia navasi 115 Spain

Pyrenaearia oberthueri 115 Spain

Pyrenaearia organiaca 115 Spain

Pyrenaearia parva 115 Spain

Pyrenaearia poncebensis 115 Spain

Pyrenaearia velascoi 115 Spain

Suboestophora altamirai 115 Spain

Suboestophora hispanica 115 Spain

Trochoidea betulonensis 115
Spain

Trochoidea claudinae 115 Spain (Balearic Is)

Trochoidea jimenensis 115 Spain

Trochoidea montserratensis 115 Spain

Xerosecta adolfi 115 Spain

Family LIMACIDAE

Malacolimax wiktori 6
Spain (Canary Is)

Family ORCULIDAE

Orcula fuchsi 115 Austria

Family PAPILLODERMIDAE

Papilloderma altonagai 115 Spain

Family POLYGYRIDAE

Ashmunella pasonis 149
Franklin Mountain Woodland Snail
USA

Mesodon clenchi 115

Clench's Middle-toothed Land Snail USA

Polygyra hippocrepis 115 USA

Polygyra peregrina 115 Strange Many-whorled Land Snail USA

Family PUPILLIDAE

Gyliotrachela catherina 98 Australia

Pupilla ficulnea 98 Australia

Sterkia clementina 149 Insular Birddrop USA

Family RHYTIDIDAE

Paryphanta busbyi Kauri Snail VU 156 B2e New Zealand

Powelliphanta marchantii 115 New Zealand

Victaphanta atramentaria 115 Australia

Family STREPTAXIDAE

Gonospira bourguignati VU 78 B2ab Réunion

Family SUBULINIDAE

Beckianum sinistrum 133 Costa Rica, Nicaragua

Leptinaria strebeliana 133 Nicaragua

Family SUCCINEIDAE

Catinella arenaria 167
Belgium, France, Germany, Ireland,
Netherlands, Norway, Poland,
Slovakia, Sweden, Switzerland,
United Kingdom

Succinea sanctaehelenae 115 St Helena Family VALLONIIDAE

Vallonia declivis 115
Austria, France, Germany, Poland,
Slovakia, Switzerland

Family VERTIGINIDAE

Vertigo alabamensis 115 USA

Vertigo arthuri 115 USA

Vertigo hebardi 115 USA

Vertigo hubricti 115 USA

Vertigo occulta 115 USA

Vertigo ovata 115 USA

Family VITRINIDAE

Insulivitrina machadoi 6 Spain (Canary Is)

Insulivitrina mascaensis 6 Spain (Canary Is)

Insulivitrina tuberculata 6 Spain (Canary Is)

Family **ZONITIDAE** 

Oxychilus basajauna 115 Spain

Paravitrea clappi 115 USA

Trochomorpha melvillensis 98
Australia

Zonites anaphiensis 118 Greece

Class ENOPLA

Order HOPLONEMERTEA

Family PROSORHOCHMIDAE

Argonemertes hillii 185

Australia



# **Extinct and Extinct in the Wild**

#### Class MAMMALIA

# Order DASYUROMORPHIA

# Family THYLACINIDAE

Thylacinus cynocephalus
Thylacine

EX 185

Australia

# Order PERAMELEMORPHIA

# Family PERAMELIDAE

Chaeropus ecaudatus

Pig-footed Bandicoot

EX 13

Australia

Macrotis leucura

Lesser Bilby

EX 13

Australia

Perameles eremiana

Desert Bandicoot

EX 13

Australia

#### Order DIPROTODONTIA

#### Family POTOROIDAE

Caloprymnus campestris

Desert Rat-kangaroo

EX 13

Australia

Potorous platyops

Broad-faced Potoroo

EX 13

Australia

# Family MACROPODIDAE

Lagorchestes asomatus

Central Hare-wallaby

EX 13

Australia

Lagorchestes leporides

Eastern Hare-wallaby

EX 13

Australia

Macropus greyi

Toolache Wallaby

EX 13

Australia

Onychogalea lunata

Crescent Nailtail Wallaby

EX 13

Australia

#### Order INSECTIVORA

#### Family SOLENODONTIDAE

Solenodon marcanoi

EX 15

Dominican Republic

### Family NESOPHONTIDAE

Nesophontes hypomicrus

Atalaye Nesophontes

EX 185

Dominican Republic, Haiti

Nesophontes micrus

Western Cuban Nesophontes

EX 185

Cuba

Nesophontes paramicrus

Saint Michel Nesophontes

EX 185

Dominican Republic, Haiti

Nesophontes sp.

EX 185

Cayman Islands

Nesophontes zamicrus

Haitian Nesophontes

 $EX^{-185}$ 

Dominican Republic, Haiti

#### Order CHIROPTERA

# Family PTEROPODIDAE

Acerodon lucifer

Panany Giant Fruit Bat

EX 42

**Philippines** 

Dobsonia chapmani

Philippine Bare-backed Fruit Bat

EX 42

Philippines

Nyctimene sanctacrucis

EX 42

Solomon Islands

Pteropus brunneus

EX 42

Australia

Pteropus loochoensis

Okinawa Flying-fox

EX 185

Japan (Nansei-shoto)

Pteropus pilosus

Palan Fruit Bat

EX 42

Palau

Pteropus subniger

EX 42

Mauritius, Réunion

Pteropus tokudae

Guam Fruit Bat

EX 42

Guam

# Family PHYLLOSTOMIDAE

Phyllonycteris major

Puerto Rican Flower Bat

EX 185

Puerto Rico

# Family VESPERTILIONIDAE

Myotis milleri

EX 42

Mexico

Myotis planiceps

EX 42

Mexico

Nyctophilus howensis

EX 42

Australia, New Caledonia

#### Family MYSTACINIDAE

Mystacina robusta

EX 42

New Zealand, Solomon Islands

# Order CARNIVORA

Family CANIDAE

Dusicyon australis

Falklands Wolf
EX 36

Falkland Islands

Family MUSTELIDAE

Mustela nigripes

Black-footed Ferret

EW 117

USA

Family PHOCIDAE

Monachus tropicalis

West Indian Monk Seal

 $EX^{-153}$ 

Bahamas, Colombia (Isla de Providencia), Cuba, Guadeloupe, Haiti, Honduras, Jamaica, Mexico,

USA

Family PROCYONIDAE

Procyon gloveralleni

Barbados Raccoon

EX 185

Barbados

Order SIRENIA

Family DUGONGIDAE

Hydrodamalis gigas

Steller's Sea Cow

EX 185

Russia, USA

Order PERISSODACTYLA

Family EQUIDAE

Equus przewalskii

Przewalski's Wild Horse

EW 64

China, Mongolia

Equus quagga

Quagga

EX 185

South Africa

Order ARTIODACTYLA

Family SUIDAE

Sus bucculentus

Vietnam Warty Pig

EX 185

Viet Nam

Family CERVIDAE

Cervus schomburgki

Schomburgk's Deer

EX 185

Thailand

Family BOVIDAE

Gazella arabica

Arabian Gazelle

EX 9

Saudi Arabia

Gazella rufina

Red Gazelle

EX 9

Algeria

Gazella saudiya

Saudi Gazelle

EW 9

Iraq, Jordan, Kuwait, Saudi Arabia, Syria, Yemen

Hippotragus leucophaeus

Bluebuck

EX 9 South Africa

Order RODENTIA

Family MURIDAE

Canariomys tamarani

EX 15

Spain (Canary Is)

Conilurus albipes  $EX^{-15}$ 

Australia

Coryphomys buhleri

EX 15

Indonesia

Leporillus apicalis

EX 15

Australia

Megalomys desmarestii

EX 15

Martinique

Megalomys luciae

EX 15

St Lucia

Microtus bayaricus

Bavarian Vole

EX 8

Germany

Nesoryzomys darwini

 $EX^{-15}$ 

Ecuador (Galápagos Is)

Nesoryzomys fernandinae

EX 15

Ecuador (Galápagos Is)

Nesoryzomys swarthi

EX 15

Ecuador (Galápagos Is)

Notomys amplus

EX is

Australia

Notomys longicaudatus

EX is

Australia

Notomys macrotis

EX 15

Australia

Notomys mordax

EX 15

Australia

Orvzomys nelsoni

EX 15 Mexico

Papagomys theodorverhoeveni

EX 15

Indonesia

Paulamys naso

EX 15

Indonesia

Peromyscus pembertoni

EX 15

Mexico

Pseudomys gouldii

EX 15

Australia

Rattus macleari EX 15

Australia

Rattus nativitatis

 $EX^{-15}$ 

Christmas Island

Spelaeomys florensis

EX 15

Indonesia

Family ERETHIZONTIDAE

Sphiggurus pallidus

EX 15

"West Indies"

Family ECHIMYIDAE

Boromys offella

EX 15

Cuba

Boromys torrei

EX is

Cuba

Brotomys contractus

EX 15

Haiti

Brotomys voratus

EX 15

Dominican Republic, Haiti

Heteropsomys antillensis

EX 15

Puerto Rico

Heteropsomys insulans

EX is

Puerto Rico

Puertoricomys corozalus

EX 15

Puerto Rico

Family CAPROMYIDAE

Capromys sp. EX 185

Cayman Islands

Geocapromys columbianus

EX 185 Cuba

Geocapromys sp.

EX 185

Cayman Islands



Geocapromys thoracatus

EX 15

Honduras

Hexolobodon phenax

EX 15

Dominican Republic, Haiti

Isolobodon montanus

EX 15

Dominican Republic, Haiti

Plagiodontia araeum

EX 15

Dominican Republic

Plagiodontia ipnaeum

EX 15

Dominican Republic, Haiti

Plagiodontia velozi

EX 185

Dominican Republic, Haiti

Rhizoplagiodontia lemkei

EX 15

Haiti

Family HEPTAXODONTIDAE

Amblyrhiza inundata

EX 15

Anguilla

Clidomys osborni

EX 15

Jamaica

Clidomys parvus

EX 15

Jamaica

Elasmodontomys obliquus

EX 15

Puerto Rico

Quemisia gravis

EX 15 Dominican Republic, Haiti

Order LAGOMORPHA
Family OCHOTONIDAE

Prolagus sardus

Sardinian Pika

ardinian I EX 104

France, Italy

Class AVES

Order STRUTHIONIFORMES

Family AEPYORNITHIDAE

Aepyornis maximus

Great Elephantbird

EX 185

Madagascar

Family ANOMALOPTERYGIDAE

Dinornis torosus

Brawny Great Moa

EX 185

New Zealand

Eurapteryx gravis

Burly Lesser Moa

EX 185 New Zealand

Megalaperyx didinus

South Island Tokoweka

EX 185

New Zealand

Order CASUARIIFORMES

Family DROMAIIDAE

Dromaius ater

King Island Emu

EX 185

Australia

Dromaius baudinianus

Kangaroo Island Emu

EX 185

Australia

Order PODICIPEDIFORMES

Family PODICIPEDIDAE

Podiceps andinus

Colombian Grebe

EX 21

Colombia

Podilymbus gigas

Atitlan Grebe

EX 185

Guatemala

Order PROCELLARIIFORMES

Family PROCELLARIIDAE

Pterodroma sp.

EX 185

Mauritius (Rodrigues)

Order PELECANIFORMES

Family PHALACROCORACIDAE

Phalacrocorax perspicillatus

Pallas's Cormorant

EX 185

Russia

Order CICONIIFORMES

Family ARDEIDAE

Ixobrychus novaezelandiae

Black-backed Bittern

EX 185

New Zealand

Nycticorax mauritianus

Mauritius Night-heron

EX 185

Mauritius

Nycticorax megacephalus

Rodrigues Night-heron

EX 185

Mauritius (Rodrigues)

Nycticorax sp.

EX 185

Réunion

Family CICONIIDAE

Ciconia sp.

EX 185

Réunion

Family THRESKIORNITHIDAE

Borbonibis latipes

Réunion Flightless Ibis

EX 185

Réunion

Order ANSERIFORMES

Family ANATIDAE

Alopochen mauritianus

Mauritian Shelduck

EX 185

Mauritius

Anas marecula

EX 185

French Southern and Antarctic

Territories (Amsterdam Id)

Anas theodori

Mauritian Duck

EX 185 Mauritius, Réunion

Camptorhynchus labradorius

Labrador Duck

EX 185

Canada, USA

Cygnus sumnerensis

Chatham Island Swan

EX 185

New Zealand (Chatham Is)

Mergus australis

Auckland Islands Merganser

EX 185

New Zealand

Order FALCONIFORMES

Family FALCONIDAE

Falco sp.

EX 185

Réunion

Polyborus lutosus Guadalupe Caracara

EX 185

Mexico

Order GALLIFORMES

Family CRACIDAE

Mitu mitu

Alagoas Curassow

EW 21

Brazil

Family PHASIANIDAE

Coturnix novaezelandiae

New Zealand Quail

EX 185

New Zealand

Order GRUIFORMES

Family RALLIDAE

Aphanapteryx bonasia

Red Rail

EX 185

Mauritius

Aphanapteryx leguati

Rodrigues Rail

EX 185

Mauritius (Rodrigues)

Atlantisia elpenor

Ascension Flightless Crake

EX 185

St Helena (Ascension)

Fulica newtoni

Mascarene Coot

EX 185

Mauritius, Réunion

Gallirallus dieffenbachii

Dieffenbach's Rail

EX 185

New Zealand (Chatham Is)

Gallirallus modestus

Chatham Islands Rail

EX 185

New Zealand (Chatham Is)

Gallirallus owstoni

Guam Rail

EW 21

Guam

Gallirallus pacificus

Tahiti Rail

EX 185

French Polynesia

Gallirallus wakensis

Wake Island Rail

EX 185

US Minor Pacific Islands (Wake Id)

Nesoclopeus poecilopterus

Bar-winged Rail

EX 21

Fiji

Porphyrio albus

Lord Howe Swamphen

EX 185

Australia

Porzana monasa

Kosrae Crake

EX 185

Federated States of Micronesia

Porzana palmeri

Laysan Crake

EX 185

USA (Hawaiian Is)

Porzana sandwichensis

Hawaiian Crake

EX 185

USA (Hawaiian 1s)

Order CHARADRIIFORMES

Family CHARADRIIDAE

Haematopus meadewaldoi Canary Islands Oystercatcher

EX 185

Spain (Canary Is)

Vanellus macropterus

Javanese Lapwing

EX 21

Indonesia

Family SCOLOPACIDAE

Prosobonia leucoptera

Tahitian Sandpiper

EX 185

French Polynesia

Family LARIDAE

Alca impennis

Great Auk

EX 185

Canada, Denmark (Faeroe Is),

Greenland, Iceland, Russia, United

Kingdom

Order COLUMBIFORMES

Family RAPHIDAE

Pezophaps solitaria

Rodrigues Solitaire

Mauritius (Rodrigues)

Raphus cucullatus

Dodo

EX 185

Mauritius

Raphus solitarius

Réunion Solitaire

EX 185

Réunion

Family COLUMBIDAE

Alectroenas nitidissima

Mauritius Blue Pigeon

EX 185

Mauritius

Columba jouyi

Ryukyu Pigeon

EX 185

Japan (Nansei-shoto)

Columba versicolor Bonin Wood Pigeon

EX 185

Japan (Ogasawara-gunto)

Ectopistes migratorius

Passenger Pigeon

EX 185

USA

Microgoura meeki

Choiseul Pigeon

EX 185

Solomon Islands

Ptilinopus mercierii

Red-moustached Fruit-Dove

EX 185

French Polynesia

Zenaida graysoni

Socorro Dove EW 21

Mexico (Revillagigedos Is)

'Alectroenas' rodericana

Rodrigues Pigeon

EX 185

Mauritius (Rodrigues)

Order PSITTACIFORMES

Family PSITTACIDAE

'Lophopsittacus' bensoni

Mauritius Grey Parrot

EX 185

Mauritius

Anodorhynchus glaucus

Glaucous Macaw

EV 2

Argentina, Brazil, Paraguay

Ara tricolor

Cuban Red Macaw

EX 185 Cuba

Conuropsis carolinensis

Carolina Parakeet

EX 185

USA

Cyanoramphus ulietanus

Raiatea Parakeet

EX 185

French Polynesia



Cyanoramphus zealandicus Black-fronted Parakeet EX <sup>185</sup> French Polynesia

Lophopsittacus mauritianus Mauritius Parrot

EX 185 Mauritius

Mascarinus mascarinus Mascarene Parrot EX <sup>185</sup>

Réunion Vestor prod

Nestor productus Norfolk Island Kaka EX 185

Norfolk Island

Psephotus pulcherrimus Paradise Parrot

EX 21
Australia
Psittacula exsul

Newton's Parakeet

Mauritius (Rodrigues)

Psittacula wardi
Seychelles Parrot

EX 185 Seychelles

Strigops habroptilus

Kakapo EW <sup>21</sup> New Zealand

'Necropsittacus' rodericanus

Rodrigues Parrot EX 185 Mauritius (Rodrigues)

Order CUCULIFORMES

Family CUCULIDAE

Coua delalandei

Snail-eating Coua EX 185 Madagascar

Order STRIGIFORMES

Family STRIGIDAE

Sauzieri sp.
Mauritian Owl
EX 185
Mauritius
Sceloglaux alb

Sceloglaux albifacies Laughing Owl

EX 185 New Zealand 'Athene' murivora Rodrigues Little Owl

EX 185 Mauritius (Rodrigues) 'Scops' commersoni Mauritian Owl

EX 185 Mauritius

Order APODIFORMES Family TROCHILIDAE

Chlorostilbon bracei Grace's Emerald EX 185

Bahamas

Order PICIFORMES

Family PICIDAE

Campephilus principalis Ivory-billed Woodpecker EX <sup>21</sup> Cuba, USA

Order PASSERIFORMES

Family XENICIDAE

Xenicus longipes
Bush Wren
EX 21
New Zealand
Xenicus lyalli
Stephens Island Wren
EX 185
New Zealand

Family PYCNONOTIDAE

Hypsipetes sp.
EX 185
Mauritius (Rod

Mauritius (Rodrigues)

Family MUSCICAPIDAE

Gerygone insularis
Lord Howe Gerygone

FX 185

EX 185 Australia

Myiagra freycineti Guam Flycatcher

EX 21 Guam

Nesillas aldabrana Aldabra Bush-warbler

EX <sup>21</sup>
Seychelles
Turdus ravidus
Grand Cayman Thrush
EX <sup>185</sup>
Cayman Islands

Turnagra capensis
Piopio
EX 185

New Zealand

Zoothera terrestris

Bonin Thrush

EX 185

Japan (Ogasawara-gunto)

Family ZOSTEROPIDAE

Zosterops strenuus Robust White-eye EX 185

EX 185 Australia

Family MELIPHAGIDAE

Chaetoptila angustipluma Kioea

EX 185

EX 185

USA (Hawaiian Is)

Moho apicalis
Oahu Oo
EX <sup>185</sup>
USA (Hawaiian Is)
Moho nobilis
Hawaii Oo

USA (Hawaiian Is)

Family DREPANIDIDAE
Chloridops kona

Kona Grosbeak
EX 185
USA (Hawaiian Is)
Ciridops anna

Ula-ai-hawane EX 185

USA (Hawaiian Is)

Drepanis funerea

Black Mamo EX <sup>185</sup> USA (Hawaiian Is)

Drepanis pacifica Hawaii Mamo

EX 185 USA (Hawaiian Is)

Hemignathus obscurus Akialoa

EX 21 USA (Hawaiian Is)

Pororeomyza flammea Molokai Creeper

USA (Hawaiian Is)

Rhodacanthis flaviceps

Lesser Koa-finch

USA (Hawaiian Is)
Rhodacanthis palmeri

Greater Koa-finch
EX 185

USA (Hawaiian Is)
Viridonia sagittirostris
Greater Amakihi

EX 185 USA (Hawaiian Is) Family ICTERIDAE

Quiscalus palustris Slender-billed Grackle EX 185

Mexico

Family FRINGILLIDAE

Chaunoproctus ferreorostris

Bonin Grosbeak

EX 185

Japan (Ogasawara-gunto)

Spiza townsendi

Townsend's Finch

EX 185

USA

Family PLOCEIDAE

Foudia sp.

Réunion Fody

EX 185 Réunion

Family STURNIDAE

Aplonis corvina

Kosrae Mountain Starling

EX 185

Federated States of Micronesia

Aplonis fusca

Tasman Starling

EX 185

Australia, Norfolk Island

Aplonis mavornata

Mysterious Starling

EX 185

Unknown

Fregilupus varius

Réunion Starling

 $EX^{-185}$ 

Réunion

Necrospar rodericanus

Rodrigues Starling

EX IRS

Mauritius (Rodrigues)

Family CALLAEIDAE

Tulling CARRABIBAT

Heteralocha acutirostris Huia

EX 185

New Zealand

Class REPTILIA

Order SAURIA

Family ANGUIDAE

Celestus occiduus

Jamaica Giant Galliwasp

EX 185

Jamaica

Family GEKKONIDAE

Hoplodactylus delcourti

EX 185

New Zealand

Nactus coindemerensis

EW 106

Mauritius

Phelsuma gigas

Rodrigues Day Gecko

EX 185

Mauritius (Rodrigues)

Family IGUANIDAE

Leiocephalus eremitus

EX 185

USA

·

Leiocephalus herminieri

EX 185

Martinique

Family SCINCIDAE

Leiolopisma mauritiana

EX 185

Mauritius

Macroscincus coctei

Cape Verde Giant Skink

EX 185

Cape Verde

Tachygia microlepis

Tonga Ground Skink

EX 185

Tonga

Tetradactylus eastwoodae

Eastwood's Longtailed Seps

 $EX^{-185}$ 

South Africa

Family TEIIDAE

Ameiva cineracea

EX 185

Guadeloupe

Ameiva major

Martinique Giant Ameiva

EX 185

Martinique

Order SERPENTES

Family BOIDAE

Bolyeria multocarinata

Round Island Boa

EX 106

Mauritius

Family COLUBRIDAE

Alsophis sancticrucis

Saint Croix Racer EX 185

EX "

Virgin Islands (US)

Family TYPHLOPIDAE

Typhlops cariei

EX 185

Mauritius

Order TESTUDINES

Family TESTUDINIDAE

Cylindraspis borbonica

EX 185

Réunion

Cylindraspis indica

EX 185

Réunion

Cylindraspis inepta

EX 185

Mauritius

Cylindraspis peltastes

EX 185

Mauritius (Rodrigues)

Cylindraspis triserrata

EX 185

Mauritius

Cylindraspis vosmaeri

EX 185

Mauritius (Rodrigues)

Class AMPHIBIA

Order ANURA

Family DISCOGLOSSIDAE

Discoglossus nigriventer

Israel Painted Frog

EX 185

Israel
[L. Huleh]

Family MYOBATRACHIDAE

Uperoleia marmorata

Marbled Toadlet

EX 14

Australia

Family RANIDAE

Arthroleptides dutoiti

EX 185

Kenya

Rana fisheri Vegas Valley Leopard Frog

EX 185

USA

Rana tlaloci

EX 185

Mexico



### Class

# **CEPHALASPIDOMORPHI**

PETROMYZONTIFORMES Family PETROMYZONTIDAE

Lampetra minima Miller Lake Lamprey EX 185 USA

# Class ACTINOPTERYGII

### Order CYPRINIFORMES

Family CYPRINIDAE

Acanthobrama hulensis

EX 185 Israel [L. Huleh]

Cyprinus yilongensis

EX 185 China

Epalzeorhynchos bicolor EW 101

Thailand Evarra bustamantei Mexican Dace

EX 185 Mexico Evarra eigenmanni

Mexican Dace EX 185 Mexico

Evarra tlahuacensis

Mexican Dace EX 185

Mexico Gila crassicauda

Thicktail Chub EX 185

USA

Lepidomeda altivelis

Pahranagat Spinedace EX 185

USA

Leuciscus turskyi

EX 185 Croatia [R. Cikola] Notropis amecae

Ameca Shiner EX 185

Mexico Notropis aulidion Durango Shiner

EX 185 Mexico Notropis orca Phantom Shiner

EX 185 Mexico, USA

Notropis saladonis Sardinita de Salado

EX 49 Mexico

Pogonichthys ciscoides

Clear Lake Splittail

EX 185 USA

Rhinichthys deaconi

Las Vegas Dace

EX 185 USA

Stypodon signifer

Stumptooth Minnow

EX 185 Mexico

Family CATOSTOMIDAE

Chasmistes muriei Snake River Sucker

EX 185 **USA** 

Lagochila lacera Harelip Sucker

EX 185 **USA** 

Order SILURIFORMES

Family TRICHOMYCTERIDAE

Rhizosomichthys totae

EX 185 Colombia [L. Tota]

Order SALMONIFORMES

Family RETROPINNIDAE

Prototroctes oxyrhynchus

New Zealand Grayling EX 185

New Zealand

Family SALMONIDAE

Coregonus alpenae Longjaw Cisco EX 185 Canada, USA [Great Lakes]

Coregonus johannae

Deepwater Cisco EX 185 Canada, USA [Great Lakes]

Coregonus nigripinnis Blackfin Cisco

EX 75 Canada [Great Lakes]

Salvelinus agassizi

Silver Trout EX 185 **USA** 

Order ATHERINIFORMES

Family ATHERINIDAE

Rheocles sikorae

Zona EX 168 Madagascar [R. Manambola]

Order CYPRINODONTIFORMES

Family CYPRINODONTIDAE

Cyprinodon alvarezi Perrito de Potosi

EW 49 Mexico

Cyprinodon ceciliae Cachorrito de la Presa

EX 49 Mexico

Cyprinodon inmemoriam Cachorrito de la Trinidad

EX 49 Mexico

Cyprinodon latifasciatus Perrito de Parras

EX 185 Mexico

Cyprinodon longidorsalis Cachorrito de Charco Palmal

EW 49 Mexico

Cyprinodon sp. Perritos de Sandia

EX 185 Mexico

Fundulus albolineatus Whiteline Topminnow

EX 185 USA

Megupsilon aporus

Cachorrito Enano de Potosi EW 49

Mexico

[L. Victoria]

Haplochromis lividus Lipochromis microdon Family GOODEIDAE EW 97 EX 97 Ameca splendens [L. Victoria] [L. Victoria] Goodeid Harpagochromis "red-eye guiarti" Platytaeniodus degeni EW 49 EW 97 EW 97 Mexico [L. Victoria] [L. Victoria] Characodon garmoni Harpagochromis artaxerxes Prognathochromis arcanus Parras Characodon EX 97 EX 97 EX 185 [L. Victoria] [L. Victoria] Mexico Prognathochromis argenteus Harpagochromis boops Empetrichthys merriami EX 97 EX 97 Ash Meadows Killifish [L. Victoria] [L. Victoria] EX 185 Harpagochromis cavifrons Prognathochromis bartoni USA EX 97 EX 97 Skiffia francesae [L. Victoria] [L. Victoria] Tiro EW 49 Harpagochromis maculipinna Prognathochromis bayoni EX 97 EX 97 Mexico [L. Victoria] [L. Victoria] Family POECILIIDAE Harpagochromis michaeli Prognathochromis decticostoma EX 97 Gambusia amistadensis EX 97 Amistad Gambusia [L. Victoria] [L. Victoria] EX 185 Prognathochromis dentex Harpagochromis nyanzae **USA** EX 97 EX 97 Gambusia georgei [L. Victoria] [L. Victoria] San Marcos Gambusia Harpagochromis pachycephalus Prognathochromis estor EX 185 EX 97 EX 97 USA [L. Victoria] [L. Victoria] Priapella bonita Harpagochromis paraplagiostoma Prognathochromis flavipinnis Guayacon Ojiazul EX 9 EX 97 EX 185 [L. Victoria] [L. Victoria] Mexico Harpagochromis pectoralis Prognathochromis gilberti EX 97 EX 97 Order SCORPAENIFORMES [L. Victoria] [L. Victoria] Prognathachromis gowersi Harpagochromis spekii Family COTTIDAE EX 97 EX 97 Cottus echinatus [L. Victoria] [L. Victoria] Utah Lake Sculpin Harpagochromis thuragnathus Prognathochromis longirostris EX 185 EX 97 EX 97 **USA** [L. Victoria] [L. Victoria] Harpagochromis victorianus Prognathochromis macrognathus Order PERCIFORMES EX 97 EX 97 [L. Victoria] [L. Victoria] Family PERCIDAE Hoplotilapia retrodens Prognathochromis mandibularis Etheostoma sellare EX 97 EX 97 Maryland Darter [L. Victoria] [L. Victoria] EX 185 Labrochromis ishmaeli Prognathochromis nanoserranus USA EW 97 EX 97 Family CICHLIDAE [L. Victoria] [L. Victoria] Astatotilapia martini Prognathochromis nigrescens Labrochromis mylergates EX 97 EX 97 EX 97 [L. Victoria] [L. Victoria] [L. Victoria] Astatotilapia megalops Labrochromis pharyngomylus Prognathochromis paraguiarti EX 97 EX 97 [L. Victoria] [L. Victoria] [L. Victoria] Gaurochromis obtusidens Labrochromis teegelaari Prognathochromis percoides EX 97 EX 97 EX 97

[L. Victoria]

[L. Victoria]



Prognathochromis perrieri EW 97

[L. Victoria]

Prognathochromis prognathus

EX 97 [L. Victoria]

Prognathochromis pseudopellegrini

EX 97

[L. Victoria]

Prognathochromis vittatus EX 97

[L. Victoria]

Prognathochromis xenostoma

EX 97

[L. Victoria]

Psammochromis cassius

EX 97

[L. Victoria]

Pyxichromis parorthostoma

EX 97

[L. Victoria]

Xystichromis bayoni

EX 97

[L. Victoria]

Yssichromis "argens"

EW 97

[L. Victoria]

Class CRUSTACEA

Order AMPHIPODA

Family CRANGONYCTIDAE

Stygobromus lucifugus

Rubious Cave Amphipod

EX 185

USA

Family GAMMARIDAE

Gammarus acheronytes

Illinois Cave Amphipod

EX 54

USA

Gammarus desperatus

Noel's Amphipod

EX 45

USA

Family PARAMELITIDAE

Austrogammarus australis

EX 185

Australia

Order CALANOIDA

Family DIAPTOMIDAE

Tropodiaptomus ctenopus

EX 145

Madagascar

Order CYCLOPOIDA

Family CYCLOPIDAE

Afrocyclops pauliani

EX 145

Madagascar

Order DECAPODA

Family ATYIDAE

Syncaris pasadenas

Pasadena Freshwater Shrimp

EX 185

USA

Order ISOPODA

Family SPHAEROMATIDAE

Thermosphaeroma thermophilum

Socorro Isopod

EW 95

USA

Order PODOCOPIDA

Family CANDONIIDAE

Namibocypris costata

EX 95

Namibia

Family CYPRIDIDAE

Liocypris grandis

EX 95

South Africa

Class INSECTA

Order COLEOPTERA

Family CARABIDAE

Mecodema punctellum

EX 185

New Zealand

Family CERAMBYCIDAE

Xylotoles costatus

EX 185

New Zealand (Chatham Is) Family CURCULIONIDAE

Dryophthorus distinguendus

EX 185

USA (Hawaiian Is)

Dryotribus mimeticus

EX 185

USA (Hawaiian Is)

Hadramphus tuberculatus

EX 185

New Zealand

Macrancylus linearis

EX 185

USA (Hawaiian Is)

Oedemasylus laysanensis

EX 185

USA (Hawaiian Is)

Pentarthrum blackburni

Blackburn's Weevil

EX 185

USA (Hawaiian Is)

Rhyncogonus bryani

EX 185

USA (Hawaiian Is)

Trigonoscuta rossi

Fort Ross Weevil

EX 185

USA

Trigonoscuta yorbalindae

Yorba Linda Weevil

EX 185

USA

Family DYTISCIDAE

Hygrotus artus

Mono Lake Diving Beetle

EX 185

**USA** 

Megadytes ducalis

EX 185

Brazil

Rhantus novacaledoniae

EX 185

New Caledonia

Rhantus orbignyi

EX 185

Argentina, Brazil Rhantus papuanus

EX 185 Papua New Guinea

Siettitia balsetensis

Perrin's Cave Beetle

EX 185 France

Order DIPTERA

Family DOLICHOPODIDAE

Campsicnemus mirabilis

 $EX^{-185}$ 

USA (Hawaiian ls)

Family DROSOPHILIDAE

Drosophila lanaiensis

EX 185 USA (Hawaiian Is)

Family TABANIDAE

Stonemyia volutina

Volutine Stoneyian Tabanid Fly

EX 185

**USA** 

Order EPHEMEROPTERA

Family EPHEMERIDAE

Pantagenia robusta

Robust Burrowing Mayfly  $EX^{-185}$ 

USA

Family SIPHLONURIDAE

Acanthometropus pecatonica Pecatonica River Mayfly

 $EX^{-185}$ 

USA

Order HOMOPTERA

Family PSEUDOCOCCIDAE

Clavicoccus erinaceus

EX 185

USA (Hawaiian Is)

Phyllococcus oahuensis

EX 185

USA (Hawaiian Is)

Order LEPIDOPTERA

Family ARGYRESTHIIDAE

Argyresthia castaneela

Chestnut Ermine Moth

EX 185

USA

Family COLEOPHORIDAE

Coleophora leucochrysella

 $EX^{-185}$ 

USA

Family **GEOMETRIDAE** 

Scotorythra megalophylla

Kona Giant Looper Moth

EX 185

USA (Hawaiian Is)

Scotorythra nesiotes

Ko'olau Giant Looper Moth

EX 185

USA (Hawaiian Is)

Scotorythra paratactis

Hawaiian Hopseed Looper Moth

EX 185

USA (Hawaiian Is)

Tritocleis microphylla

Ola'a Peppered Looper Moth

EX 185

USA (Hawaiian Is)

Family LIBYTHEIDAE

Libythea cinyras

EX 185

Mauritius

Family LYCAENIDAE

Deloneura immaculata

 $EX^{-185}$ 

South Africa

Glaucopsyche xerces

Xerces Blue

EX 185

**USA** 

Lepidochrysops hypopolia

EX 185

South Africa

Family NEPTICULIDAE

Ectodemia castaneae

American Chestnut Moth

EX 185

USA

Ectodemia phleophaga

Phleophagan Chestnut Moth

EX 185

USA

Family NOCTUIDAE

Agrotis crinigera

Poko Noctuid Moth

 $EX^{-185}$ 

USA (Hawaiian Is)

Agrotis fasciata

Midway Noctuid Moth

EX 185

USA (Hawaiian Is)

Agrotis kerri

Kerr's Noctuid Moth

EX 185

USA (Hawaiian Is)

Agrotis laysanensis Laysan Noctuid Moth

EX 185

USA (Hawaiian Is)

Agrotis photophila

EX 185

USA (Hawaiian Is)

Agrotis procellaris

EX 185

USA (Hawaiian Is)

Helicoverpa confusa

Confused Moth

EX 185

USA (Hawaiian Is)

Helicoverpa minuta

Minute Noctuid Moth

EX 185

USA (Hawaiian Is)

Hypena laysanensis

Laysan Dropseed Noctuid Moth

EX 185

USA (Hawaiian Is)

Hypena newelli

Hilo Noctuid Moth

EX 185

USA (Hawaiian Is)

Hypena plagiota

Lovegrass Noctuid Moth

EX 185

USA (Hawaiian Is)

Hypena senicula

Kaholuamano Noctuid Moth

EX 185

USA (Hawaiian Is)

Family PYRALIDAE

Genophantis leahi

EX 185

USA (Hawaiian Is)

Hedylepta asaphrombra

EX 185

USA (Hawaiian Is)

Hedylepta continuatalis

EX 185

USA (Hawaiian Is)

Hedylepta epicentra

EX 185

USA (Hawaiian Is)

Hedylepta euryprora

 $EX^{-185}$ 

USA (Hawaiian Is)

Hedylepta fullawayi

EX 185

USA (Hawaiian ls)

Hedylepta laysanensis

EX 185

USA (Hawaiian Is)

Hedylepta meyricki

EX 185

USA (Hawaiian Is)

Hedylepta musicola

EX 185

USA (Hawaiian Is)

Hedylepta telegrapha

EX 185 USA (Hawaiian Is)

Oeobia sp. EX 185

USA (Hawaiian Is)

Family SPHINGIDAE

Tinostoma smaragditis

Fabulous Green Sphinx of Kauai

EX 185 USA (Hawaiian Is)

Family TISCHERIIDAE

Tischeria perplexa

Chestnut Clearwing Moth EX 185

USA



# Family ZYGAENIDAE

Levuana irridescens Levuana Moth EX 185 USA (Hawaiian Is)

# Order ODONATA

### Family COENAGRIONIDAE

Megalagrion jugorum Jugorum Megalagrion Damselfly USA (Hawaiian Is)

### Family LIBELLULIDAE

Sympetrum dilatatum EX 123 St Helena

# Order ORTHOPTERA

# Family ACRIDIDAE

Conozoa hyalina Central Valley Grasshopper EX 146 USA Family GRYLLIDAE

Leptogryllus deceptor Oahu Deceptor Bush Cricket EW 125 USA (Hawaiian Is)

### Family TETTIGONIDAE

Neduba extincta Antioch Dunes Shieldback Katydid EX 185 USA

# Order PHASMATOPTERA Family PHASMATIDAE

Dryococelus australis Lord Howe Island Stick-insect EX 185 Australia

# Order PLECOPTERA

# Family CHLOROPERLIDAE

Alloperla roberti Robert's Stonefly EX 185 USA

# Order TRICHOPTERA Family HYDROPSYCHIDAE

Hydropsyche tobiasi Tobias' Caddisfly EX 185 Germany

### Family LEPTOCERIDAE

Athens Caddisfly EX 185 USA Triaenodes tridonata Three-tooth Caddisfly EX 185 USA

Triaenodes phalacris

# Family RHYACOPHILIDAE

Rhyacophila amabilis Castle Lake Caddisfly EX 185 USA

# Class ONYCHOPHORA

# Order ONYCHOPHORA Family PERIPATOPSIDAE

Opisthopatus roseus EX 122 South Africa

Peripatopsis clavigera EX 122

South Africa Peripatopsis leonina EX 122 South Africa

### Class BIVALVIA

# Order UNIONOIDA

Family UNIONIDAE

Dysnomia arcaeformis? Sugarspoon EX is

Dysnomia biemarginata Angled Riffleshell EX 115

**USA** 

Dysnomia flexuosa Leafshell

EX 115 **USA** 

USA

Dysnomia haysiana Acornshell

EX 115 USA

Dysnomia lefevrei EX 115

USA Dysnomia lenior Narrow Catspaw EX 115 USA

Dysnomia lewisii?

Forkshell EX 115 USA

Dysnomia personata Round Combshell EX 115

USA

Dysnomia propingua Tennessee Riffleshell EX 115

USA

Dysnomia sampsoni Wabash Riffleshell EX 115 USA

Dysnomia stewardsoni Cumberland Leafshell EX 115

USA Unio cariei EX 27 Réunion

# Class GASTROPODA

# Order ARCHAEOGASTROPODA

Family **LOTTIDAE** Lottia alveus

**Eelgrass Limpet** EX 26 USA

Family NACELLIDAE Collisella edmitchelli

EX 26 USA

# Order BASOMMATOPHORA

Family PLANORBIDAE

Miratesta celebensis EX 26

Order MESOGASTROPODA

Family ASSIMINEIDAE

Omphalotropis plicosa EX 78

Mauritius

Indonesia

Family CYCLOPHORIDAE

Cyclophorus horridulum

EX 27 Mayotte Cyclosurus mariei

EX 27 Mayotte

**USA** 

EX 115

USA

Leptoxis anthonyix Anthony's River Snail

Achatinella valida Family POMATIASIDAE Family HYDROBIIDAE EX 115 Tropidophora desmazuresi Angrobia dulvertonensis USA (Hawaiian Is) EX 78 EX 115 Auriculella expansa Mauritius (Rodrigues) Australia EX 115 Tropidophora semilineata Beddameia tumida USA (Hawaiian Is) EX 27  $EX^{-138}$ Mayotte Auriculella uniplicata Australia EX 115 Family POMATIOPSIDAE Belgrandiella intermedia USA (Hawaiian Is) Tamicha cawstani EX 79 Lamellidea monodonta  $EX^{-33}$ Austria EX 115 South Africa Bythinella intermedia Japan (Ogasawara-gunto) EX 115 Lamellidea nakadai Order STYLOMMATOPHORA Austria EX 115 Family ACHATINELLIDAE Japan (Ogasawara-gunto) Lithoglyphus umbilicata Umbilicate Pebblesnail Achatinella abbreviata Newcambia philippiana EX 115  $EX^{-115}$ EX 115 **USA** USA (Hawaiian Is) USA (Hawaiian Is) Littoridina gaudichaudii Achatinella buddii Partulina crassa EX 26 EX 115 EX 115 USA (Hawaiian Is) Ecuador USA (Hawaiian ls) Achatinella caesia Ohridohauffenia drimica Partulina montagui EX 115 EX 115 EX 115 USA (Hawaiian Is) Yugoslavia USA (Hawaiian Is) Achatinella casta Pasticobia narfolkensis Perdicella fulgurans EX 115 EX 115 EX 113 USA (Hawaiian Is) Norfolk Island USA (Hawaiian ls) Achatinella decara Family LITTORINIDIDAE Perdicella maniensis EX 115 EX 115 USA (Hawaiian Is) Littoraria flammea USA (Hawaiian Is) EX 26 Achatinella dimorpha Perdicella zebra EX 115 China EX 115 USA (Hawaiian Is) Family NEOCYCLOTIDAE USA (Hawaiian Is) Achatinella elegans Perdicella zebrina EX 115 Amphicyclatulus guadelaupensis EX 26 EX 115 USA (Hawaiian Is) USA (Hawaiian Is) Guadeloupe Achatinella juddii EX 115 Tornelasmias capricorni Incerticyclus cinereus EX 138 EX 26 USA (Hawaiian Is) Australia Martinique Achatinella juncea EX 115 Family AMASTRIDAE Incerticyclus martinicensis USA (Hawaiian Is) EX 26 Amastra albalabris Achatinella lehuiensis Martinique  $EX^{-115}$ EX 115 USA (Hawaiian Is) Family PLEUROCERIDAE USA (Hawaiian Is) Amastra carnea Anculosa formanii Achatinella livida EX 115 Interrupted Rocksnail EX 115 EX iis USA (Hawaiian Is) USA (Hawaiian Is) Amastra crassilabrum **USA** Achatinella papyracea EX 115 EX 115 Elimia hartmanniana USA (Hawaiian Is) USA (Hawaiian Is) High-spired Elimia EX is Amastra elangata Achatinella spaldingi

EX 115

EX 115

USA (Hawaiian Is)

Achatinella thaanumi

USA (Hawaiian Is)

EX 113

USA (Hawaiian Is)

USA (Hawaijan Is)

Amastra forbesi EX 113



Amastra pellucida EX 115 USA (Hawaiian Is)

Amastra porcus EX 115

USA (Hawaiian Is)

Amastra reticulata EX 115

USA (Hawaiian Is) Amastra subrostrata

EX 115 USA (Hawaiian Is)

Amastra subsoror EX 115 USA (Hawaiian Is)

Amastra tenuispira

EX 115 USA (Hawaiian Is)

Amastra umbilicata

EX 115 USA (Hawaiian Is)

Carelia anceophila EX 115

USA (Hawaiian Is)

Carelia bicolor EX 115 USA (Hawaiian Is)

Carelia cochlea EX 115 USA (Hawaiian Is)

Carelia cumingiana EX 115

USA (Hawaiian Is) Carelia dolei

EX 115 USA (Hawaiian Is)

Carelia evelynae EX 115

USA (Hawaiian Is) Carelia glossema

EX 115 USA (Hawaiian Is) Carelia hyattiana

EX 115 USA (Hawaiian Is)

Carelia kalalauensis EX 115

USA (Hawaiian Is)

Carelia knudseni EX 115 USA (Hawaiian Is)

Carelia lirata EX 115 USA (Hawaiian Is)

Carelia lymani EX 115 USA (Hawaiian Is) Carelia mirabilis

EX 115

USA (Hawaiian Is)

Carelia necra EX 115

USA (Hawaiian Is)

Carelia olivacea

EX 115

USA (Hawaiian Is)

Carelia paradoxa

EX 115

USA (Hawaiian Is)

Carelia periscelis

EX 115

USA (Hawaiian Is)

Carelia pilsbryi

EX 115

USA (Hawaiian Is)

Carelia sinclairi

EX 115

USA (Hawaiian Is)

Carelia tenebrosa EX 115

USA (Hawaiian Is)

Carelia turricula EX 115

USA (Hawaiian Is)

Family ARIOPHANTIDAE

Vitrinula chaunax EX 115

Japan (Ogasawara-gunto)

Vitrinula chichijimana EX 115

Japan (Ogasawara-gunto) Vitrinula hahajimana

EX 115

Japan (Ogasawara-gunto)

Family CAMAENIDAE

Pleurodonte desidens EX 26

Martinique

Family CERASTUIDAE

Rhachis comorensis EX 115

Mayotte Rhachis sanguineus

EX 115 Mauritius

Family CHAROPIDAE

Helenoconcha leptalea EX 115

Helenoconcha minutissima EX 115

St Helena

St Helena

Helenoconcha polvodon

EX 115 St Helena

Helenoconcha pseustes EX 115

St Helena

Helenoconcha sexdentata EX 115

St Helena

Helenodiscus bilamellata EX 115

St Helena

Helenodiscus vernoni

EX 115 St Helena

Libera subcavernula

EX 154 Cook Islands

Libera tumuloides

EX 154

Cook Islands

Mautodontha acuticosta EX 154 French Polynesia

Mautodontha consimilis

EX 154 French Polynesia

Mautodontha consobrina EX 154

French Polynesia

Mautodontha maupiensis EX 154

French Polynesia

Mautodontha parvidens EX 154

French Polynesia Mautodontha punctiperforata EX 154

French Polynesia

Mautodontha saintjohni EX 154

French Polynesia

Mautodontha subtilis EX 154 French Polynesia

Mautodontha unilamellata

EX 154 Cook Islands

Sinployea canalis EX 155

Cook Islands Sinployea decorticata

EX 155 Cook Islands

Sinployea harveyensis EX 155 Cook Islands

Sinployea otareae EX 155

Cook Islands

Sinployea planospira

EX 155

Cook Islands

Sinployea proxima

EX 155

Cook Islands

Sinployea rudis

EX 155

Cook Islands

Sinployea tenuicostata

EX 155

Cook Islands

Sinployea youngi

EX 155

Cook Islands

Taipidon anceyana

EX 154

French Polynesia

Taipidon marquesana

EX 154

French Polynesia

Taipidon octolamellata

EX 154

French Polynesia

Thaumatodon multilamellata

 $EX^{-154}$ 

Cook Islands

Family DISCIDAE

Discus guerinianus

EX 154

Portugal (Madeira)

Family ENDODONTIDAE

Hirasea planulata

Mautodontha zebrina

Cook Islands

EX 115

St Helena

EX 115

Pseudocampylaea spurca

EX 115 St Helena

Family EUCONULIDAE

Caldwellia philyrina

EX 78 Mauritius

EX 115

Japan (Ogasawara-gunto)

 $EX^{-115}$ 

Pseudocampylaea dianae

St Helena

Pseudocampylaea laetissima EX 115

Pseudocampylaea persoluta

St Helena

Megalolulimus cardosoi EX 108

Brazil

Family OLEACINIDAE

Oleacina guadeloupensis

EX 26 Guadeloupe

Colparion madgei

Mauritius (Rodrigues)

Ctenoglypta newtoni

Dupontia proletaria

Mauritius, Réunion

Pachystyla rufozonata

Family HELICARIONIDAE

EX 78

EX 78

 $EX^{-78}$ 

EX 7

Mauritius

EX 115

EX 115

EX 115

EX 78

EX 115

Réunion

 $EX^{-137}$ 

EX 115

EX 115

EX 115

EX 87

Israel

Erepta nevilli

Mauritius

Advena campbelli

Norfolk Island

Diastole matafaoi

American Samoa

Harmogenanina linophora

Harmogenanina subdetecta

Mauritius, Réunion

Nancibella quintalia

Panulena perrugosa

Norfolk Island

Norfolk Island

Norfolk Island

Norfolk Island

Quintalia stoddartii

Family HELICIDAE

Portugal (Madeira)

Trochoidea picardi

Pseudocampylaea loweii

Family HYGROMIDAE

Family MEGALOBULIMIDAE

Ouintalia flosculus EX 115

Mauritius

Family ORTHALICIDAE

Leucocharis loyaltiensis

EX 115

New Caledonia

Leucocharis porphyrocheila

EX 115

New Caledonia

Placostylus cuniculinsulae

EX 138

Australia

Family PARTULIDAE

Partula affinis

EX 115

French Polynesia

Partula approximata

EX 115

French Polynesia

Partula arguta

EX 115

French Polynesia

Partula atilis

EX 115

French Polynesia

Partula attenuata

EX 115

French Polynesia

Partula aurantia  $EX^{-115}$ 

French Polynesia

Partula auriculata

EX 115

French Polynesia

Partula bilineata

EX 115

French Polynesia

Partula callifera

EX 115

French Polynesia

Partula candida

EX 115

French Polynesia

Partula castanea

EX 115

French Polynesia

Partula cedista

EX 115

French Polynesia

Partula citrina

EX 115

French Polynesia

Partula compacta

EX 115

French Polynesia

Partula crassilabris

EX 115

French Polynesia



Partula cuneata EX 115 French Polynesia Partula cytherea EX 115 French Polynesia Partula dentifera EW 43 French Polynesia Partula dolichostoma EX 115 French Polynesia Partula dolorosa EX 115 French Polynesia Partula eremita EX 115 French Polynesia Partula exigua EX 115 French Polynesia Partula faba EW 43 French Polynesia Partula formosa EX 115 French Polynesia Partula fusea EX 115 French Polynesia Partula garretti EW 115 French Polynesia Partula hebe EW 115 French Polynesia Partula imperforata EX 115 French Polynesia Partula jackieburchi EX 115 French Polynesia Partula labrusca EW 115 French Polynesia Partula leptochila EX 115 French Polynesia Partula levilineata EX 115 French Polynesia Partula levistriata EX 115

French Polynesia

French Polynesia

Partula lutea

EX 115

Partula microstoma EX 115 French Polynesia Partula mirabilis EW 115 French Polynesia Partula mooreana EW 115 French Polynesia Partula nodosa EX 115 French Polynesia Partula planilabrum EX 115 French Polynesia Partula producta EX 115 French Polynesia Partula protea EX 115 French Polynesia Partula protracta EX 115 French Polynesia Partula radiata EX 115 French Polynesia Partula raiatensis EX 115 French Polynesia Partula remota EX 115 French Polynesia Partula robusta EX 115 French Polynesia Partula rustica EX 115 French Polynesia Partula sagitta EX 115 French Polynesia Partula salifana Mount Alifana Partula EX 115 Guam Partula thalia EX 115 French Polynesia Partula tohiveana EW 115 French Polynesia Partula tristis EW 115 French Polynesia Partula turgida EX 115

Partula umbilicata EX 115 French Polynesia Partula variabilis EX 115 French Polynesia Partula vittata EX 115 French Polynesia Family PUPILLIDAE Gastrocopta chichijimana EX 175 Japan (Ogasawara-gunto) Gastrocopta ogasawarana Japan (Ogasawara-gunto) Lciostyla lamellosa EX 154 Portugal (Madeira) Lyropupa perlonga EX 52 USA (Hawaiian Is) Nesopupa turtoni EX 115 St Helena Pupilla obliquicosta EX 115 Family STREPTAXIDAE Gibbus lyonetianus EX 78 Mauritius Gonidomus newtoni EX 78 Mauritius Gonospira nevilli EX 78 Mauritius Gulella mayottensis EX 115 Mayotte Gulella thomasetti EX 115 Seychelles Family SUBULINIDAE Chilonopsis blofeldi EX 115 St Helena Chilonopsis exulatus EX 115 St Helena Chilonopsis helena EX 115 St Helena Chilonopsis melanoides EX 115

St Helena

French Polynesia

Chilonopsis nonpareil EX 115

St Helena

Chilonopsis subplicatus

EX 115

St Helena

Chilonopsis subtruncatus

EX 115 St Helena Chilonopsis turtoni EX 115

St Helena

Family VERTIGINIDAE

Campolaemus perexilis EX 115

St Helena

Class TURBELLARIA

Order TRICLADIDA

Family KENKIIDAE

Romankenkius pedderensis Lake Pedder Planarian EX <sup>185</sup>

Australia

# **Data Deficient**

### Class MAMMALIA

### Order DIDELPHIMORPHIA

### Family DIDELPHIDAE

Gracilinanus kalinowskii 121 Peru

Gracilinanus longicaudis 121 Colombia

Gracilinanus perijae 121 Colombia

Marmosa canescens 121
Mexico

Marmasa tyleriana 121 Venezuela

### Order DASYUROMORPHIA

### Family DASYURIDAE

Antechinomys laniger 13 Kultarr Australia

Antechinus habbema 13
Habbema Antechinus
Indonesia, Papua New Guinea

Antechinus naso 13 Long-nosed Antechinus Indonesia, Papua New Guinea

Antechinus sp. 13 Normanby Antechinus Papua New Guinea

Antechinus wilhelmina 13 Lesser Antechinus Indonesia, Papua New Guinea

Murexia rothschildi 13 Broad-striped Dasyure Papua New Guinea

Papua New Guinea

Phascolosorex doriae 13

Red-bellied Dasyure

Indonesia

Sminthopsis fuliginosus 13

Australia

Sminthopsis leucopus 13 White-footed Dunnart Australia

# Order PERAMELEMORPHIA

# Family PERORYCTIDAE

Echymipera clara 13 Clara's Echymipera Indonesia Echymipera davidi <sup>13</sup> David's Echymipera Papua New Guinea

Echymipera echinista 13 Menzies' Echymipera Papua New Guinea

Microperoryctes murina 13 Mouse Bandicoot Indonesia

Microperoryctes papuensis 13
Papuan Bandicoot
Papua New Guinea

Peroryctes broadbenti 13 Giant Bandicoot Papua New Guinea

Rhynchomeles prattorum 13
Ceram Bandicoot
Indonesia

# Order DIPROTODONTIA Family PHALANGERIDAE

Ailurops ursinus 13
Bear Phalanger
Indonesia

Phalanger alexandrae 13 Gebe Cuscus

Spilocuscus papuensis 13 Waigeo Cuscus Indonesia

Indonesia

Strigocuscus celebensis 13 Small Cuscus

Indonesia

Strigocuscus gymnotis 13

Ground Cuscus

Indonesia, Papua New Guinea

### Family MACROPODIDAE

Dendrolagus inustus 13 Grizzled Tree-kangaroo Indonesia, Papua New Guinea

Dendrolagus spadix 13 Lowland Tree-kangaroo Papua New Guinea

Dendrolagus ursinus 13 VogelkopTree-kangaroo Indonesia

### Family PSEUDOCHEIRIDAE

Pseudocheirus canescens 13 Lowland Ringtail Indonesia, Papua New Guinea Pseudocheirus schlegeli <sup>13</sup> Arfak Ringtail Indonesia

Pseudochirulus caroli 13
Weyland Ringtail
Indonesia

#### Order XENARTHRA

### Family MEGALONYCHIDAE

Choloepus didactylus 61
Brazil, Ecuador, French Guiana,
Guyana, Peru, Suriname, Venezuela

Choloepus hoffmanni <sup>61</sup>
Bolivia, Brazil, Colombia,
Costa Rica, Nicaragua, Panama,
Peru, Venezuela

# Family DASYPODIDAE

Cabassous centralis 61
Belize, Colombia, Costa Rica,
El Salvador, Guatemala, Honduras,
Mexico, Nicaragua, Panama

Cabassous chacoensis 61 Argentina, Brazil, Paraguay

Dasypus sabanicola 61 Colombia, Venezuela

Zaedyus pichiy 61 Argentina, Chile

# Order INSECTIVORA Family SORICIDAE

Crocidura armenica \*
Armenia

Crocidura minuta % Indonesia

Crocidura religosa \*
Egyptian Pygmy Shrew
Egypt

Crocidura shantungensis <sup>96</sup> China

Sorex excelsus \*
China, Nepal?

Suncus malayanus \*
Malaysia, Thailand

# Order CHIROPTERA

### Family PTEROPODIDAE

Pteropus argentatus 42 Silvery Fruit Bat Indonesia Pteropus mearnsi 42 Philippines

# Family RHINOLOPHIDAE

Coelops hirsutus 42 Philippines

Hipposideros crumeniferus 42 Indonesia

Hipposideros doriae 42 Malaysia

Hipposideros lamottei 42 Guinea

Hipposideros pomona 42 China, India, Malaysia, Myanmar, Thailand

Rhinolophus adami 42 Congo

Rhinolophus anderseni 42 Philippines

Rhinolophus deckenii 42 Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zimbabwe

Rhinolophus inops 42 Philippines

Rhinolophus mitratus 42 India

Rhinolophus osgoodi 42 China

Rhinolophus subbadius 42 India, Myanmar, Nepal, Viet Nam

#### Family PHYLLOSTOMIDAE

Anoura luismanueli 42 Venezuela

Artibeus incomitatus 42 El Salvador, Honduras, Nicaragua

# Family VESPERTILIONIDAE

Chalinolobus kenyacola 42 Kenya

Eptesicus flavescens 42 Angola, Burundi

Eptesicus kobayashii 42 North Korea, South Korea

Eptesicus tatei 42 India

Kerivoula aerosa 42 South Africa?

Kerivoula africana 42 Tanzania

Murina fusca 42 China

Murina tenebrosa 42 Japan

Myotis abei 42 Russia Myotis australis 42 Australia

Myotis fimbriatus 42 China

Myotis hermanni 42 Indonesia?

Myotis insularum 42 American Samoa?, Western Samoa?

Myotis longipes 42 Afghanistan, India, Viet Nam?

Myotis oreias 42 Singapore

Myotis ozensis 42 Japan

Myotis schaubi 42 Armenia (ex?), Hungary (ex), Iran?

Pipistrellus aero 42 Ethiopia?, Kenya

Pipistrellus endoi 42 Japan

Pipistrellus lophurus 42 Myanmar, Thailand

Pipistrellus minahassae 42 Indonesia

Pipistrellus peguensis 42 Myanmar

Pipistrellus permixtus 42 Tanzania

Pipistrellus societatis 42 Malaysia

Scotomanes emarginatus 42 India?

Scotophilus celebensis 42 Indonesia

### Family MOLOSSIDAE

Myopterus daubentonii 42 Côte d'Ivoire, Senegal, Zaire

#### Order PRIMATES

#### Family GALAGONIDAE

Galagoides granti 143 Grant's Dwarf Galago Malawi, Mozambique, Tanzania, Zimbabwe

Galagoides orinus 143 Amani Dwarf Galago Tanzania

Galagoides rondoensis 143 Rondo Dwarf Galago Tanzania

Galagoides udzungwensis 143 Matundu Dwarf Galago Tanzania

# Family TARSIIDAE

Tarsius dianae 143 Indonesia

Tarsius pelengensis 143 Indonesia

Tarsius pumilus 143 Lesser Spectral Tarsier Indonesia

Tarsius sangirensis 143 Indonesia

Tarsius spectrum 143 Spectral Tarsier Indonesia

# Family CALLITRICHIDAE

Callithrix saterei 143 Brazil

# Family CEBIDAE

Aotus hershkovitzi 143 Colombia

Callicebus olallae 143 Beni Titi Monkey Bolivia

# Family CERCOPITHECIDAE

Cercopithecus dryas 143 Dryas Monkey Zaire

Macaca ochreata 143 Booted Macaque Indonesia

Presbytis fredericae 143
Javan Fuscous Leaf Monkey
Indonesia

Presbytis frontata 143
White-fronted Leaf Monkey
Indonesia, Malaysia

Trachypithecus geei 143 Golden Langur Bhutan, India

Trachypithecus laotum 143 Laos, Viet Nam

Trachypithecus phayrei 143
Bangladesh?, China, India?, Laos,
Myanmar, Thailand, Viet Nam

#### Family HYLOBATIDAE

Hylobates gabriellae 143 Buff-cheeked Gibbon Laos, Viet Nam

Hylobates hoolock 143
Hoolock Gibbon
Bangladesh, China, India, Laos?,
Myanmar



Hylobates leucogenys 143 China, Laos, Viet Nam

#### Order CARNIVORA

### Family CANIDAE

Dusicyon microtis 36
Small-eared Zorro
Brazil, Colombia, Ecnador, Peru,

Venezuela

Dusicyon sechurae 36 Sechuran Zorro Ecuador, Peru

Dusicyon vetulus 36 Hoary Zorro Brazil

Fennecus zerda 36 Fennec Fox

Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Saudi Arabia?, Sudan, Tunisia?

Vulpes bengalensis 36 Bengal Fox India, Nepal, Pakistan

Vulpes cana 36
Blanford's Fox
Afghanistan, Egypt, Iran, Israel,
Jordan, Ornan, Pakistan, Saudi
Arabia, Turkmenistan, United Arab
Emirates, Uzbekistan, Yemen?

Vulpes corsac 36 Corsac Fox

Afghanistan, China, India, Iran?, Kazakhstan, Kyrgyzstan?, Mongolia, Pakistan?, Russia?, Turkmenistan?, Uzbekistan?

Vulpes pallida 36 Pale Fox

Benin?, Burkina Faso?, Cameroon?, Chad, Eritrea, Ethiopia, Libya, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan

Vulpes rueppelli 36 Ruppell's Fox

Afghanistan, Algeria, Chad, Egypt, Iran, Iraq, Israel, Jordan, Libya, Mali, Mauritania, Morocco, Niger, Saudi Arabia, Sudan, Tunisia?

# Family FELIDAE

Felis bieti 40 Chinese Desert Cat China

Pardofelis marmorata 40 Marbled Cat

Bhutan, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Thailand, Viet Nam Prionailurus rubiginosus 40 Rusty-spotted Cat India, Sri Lanka

### Family MUSTELIDAE

Mustela africana 117 Tropical Weasel Brazil, Colombia?, Ecuador, Peru

# Family PROCYONIDAE

Nasuella olivacea 117 Colombia, Ecuador, Venezuela

### Family URSIDAE

Helarctos malayanus 17 Sun Bear

Brunei, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Viet Nam

# Family VIVERRIDAE

Genetta abyssinica 117 Abyssinian Genet Djibouti, Ethiopia, Somalia

Genetta johnstoni 117 Johnston's Genet Côte d'Ivoire, Guinea, Liberia

Mungos gambianus 117
Garnbian Mongoose
Côte d'Ivoire, Gambia, Ghana,
Niger, Nigeria, Senegal, Sierra
Leone, Togo

Osbornictis piscivora 117 Zaire

# Order CETACEA

### Family BALAENOPTERIDAE

Balaenoptera edeni 41 Bryde's Whale

[Atlantic (eastern central, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, northeast, southeast, southwest, western central)

### Family DELPHINIDAE

Cephalorhynchus commersonii 41 Commerson's Dolphin Argentina, Chile, Falkland Islands, French Southern and Antarctic Territories (Kerguelen Is) [Atlantic (southwest), Indian Ocean (Antarctic), Pacific (southeast)]

Cephalorhynchus eutropia 41 Black Dolphin

Chile [Pacific (southeast)]

Cephalorhynchus heavisidii 41 Heaviside's Dolphin

Angola?, Namibia, South Africa [Atlantic (southeast)]

Feresa attenuata 41

Pygmy Killer Whale

[Atlantic (eastern central, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southeast, southwest, western central)]

Grampus griseus 41

Risso's Dolphin
[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

Lagenodelphis hosei 41

Fraser's Dolphin
[Atlantic (eastern central, southeast, southwest, western central), Indian
Ocean (eastern, western), Pacific
(eastern central, northwest, southeast, western central)]

Lagenorhynchus australis 41
Peale's Dolphin
Argentina, Chile, Falkland Islands

Argentina, Chile, Falkland Islands [Atlantic (southwest), Pacific (southeast)]

Lagenorhynchus obscurus 41 Dusky Dolphin

Argentina, Chile, Falkland Islands, French Southern and Antarctic Territories (Kerguelen Is), New Zealand (Auckland Is, Campbell Id), Peru, South Africa [Atlantic (southeast, southwest), Pacific (southeast, southwest)]

Lissodelphis peronii 41
Southern Right Whale Dolphin
[Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (Antarctic,

Orcaella brevirostris 41
Irrawaddy Dolphin
Australia, Bangladesh, B

southeast, southwest)]

Australia, Bangladesh, Brunei?, Cambodia, India, Indonesia, Laos?, Malaysia, Myanmar, Papua New Guinea, Philippines?, Singapore?, Thailand, Viet Nam [Indian Ocean (eastern), Pacific (western central)] [R. Brahmaputra, R. Ganges, R. Irrawaddy]

# Sotalia fluviatilis 41

Tucuxi

Bolivia?, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela [Atlantic (southwest, western central)] [R. Amazon]

# Sousa chinensis 41

Indo-Pacific Hump-backed Dolphin Australia, Bahrain, Bangladesh, Brunei, Cambodia, China, Djibouti, Egypt, Ethiopia, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Kenya, Kuwait, Madagascar, Malaysia, Mozambique, Myanmar, Oman, Pakistan, Papua New Guinea, Philippines, Qatar, Saudi Arabia, Sornalia, South Africa, Sri Lanka, Sudan, Taiwan, Tanzania, Thailand, United Arab Emirates, Viet Nam, Yemen

[Atlantic (southeast), Indian Ocean (eastern, western), Pacific (northwest, southwest, western central)]

# Sousa teuszii 41

Atlantic Hump-backed Dolphin Angola?, Benin, Cameroon, Congo?, Côte d'Ivoire, Equatorial Guinea?, Gabon?, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone, Togo, Zaire? [Atlantic (eastern central, southeast)]

### Stenella clymene 41 Clymene Dolphin

[Atlantic (eastern central, northwest, southeast, southwest, western central)]

### Stenella frontalis 41

Atlantic Spotted Dolphin [Atlantic (eastern central, northeast, northwest, southeast, southwest, western central)]

# Steno bredanensis 41

Rough-toothed Dolphin [Atlantic (eastern central, northeast, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

### Tursiops truncatus 41 Bottlenose Dolphin

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean

and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

### Family MONODONTIDAE

Monodon monoceros 41

Narwhal

Canada, Greenland, Iceland?, Norway, Russia, USA [Arctic Sea, Atlantic (northeast, northwest)]

### Family PHOCOENIDAE

Australophocaena dioptrica 41 Spectacled Porpoise

Argentina, Australia, Chile, Falkland Islands, French Southern and Antarctic Territories (Kerguelen Is), New Zealand (Auckland Is), Uruguay [Atlantic (Antarctic, southwest), Indian Ocean (Antarctic, eastern), Pacific (southeast, southwest)]

### Neophocaena phocaenoides 41 Finless Porpoise

Bahrain, Bangladesh, Brunei?, Cambodia, China, Hong Kong?, India, Indonesia, Iran, Iraq, Japan, Kuwait, Malaysia, Myanmar, North Korea, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore?, South Africa?, South Korea, Sri Lanka, Taiwan, Thailand, United Arab Emirates, Viet Nam [Indian Ocean (eastern, western), Pacific (northwest, western central)] [freshwater Indo-Pacific]

#### Phocoena spinipinnis 41

Burmeister's Porpoise Argentina, Brazil, Chile, Peru, Uruguay [Atlantic (southwest), Pacific (southeast)]

# Family PLATANISTIDAE

Pontoporia blainvillei 41

La Plata River Dolphin Argentina, Brazil, Uruguay [Atlantic (southwest)] [La Plata estuary and adjacent rivers]

# Family ZIPHIIDAE

Mesoplodon bidens 41 Sowerby's Beaked Whale [Atlantic (eastern central, northeast, northwest)]

#### Mesoplodon bowdoini 41

Andrews' Beaked Whale [Indian Ocean (eastern), Pacific (southwest)]

### Mesoplodon carlhubbsi 41 Hubbs' Beaked Whale

[Pacific (eastern central, northeast, northwest)]

#### Mesoplodon densirostris 41 Blainville's Beaked Whale

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northwest, southeast, southwest, western central)]

# Mesoplodon europaeus 41

Gervais' Beaked Whale Atlantic (northwest, western central)]

# Mesoplodon ginkgodens 41

Ginkgo-toothed Beaked Whale [Indian Ocean (eastern, western), Pacific (eastern central, northwest, southwest, western central)]

# Mesoplodon gravi 41

Gray's Beaked Whale [Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (southeast, southwest)]

### Mesoplodon hectori 41

Hector's Beaked Whale

[Atlantic (southeast, southwest), Indian Ocean (eastern), Pacific (eastern central, southeast, southwest)]

# Mesoplodon layardii 41

Strap-toothed Whale

[Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (southeast, southwest)]

# Mesoplodon mirus 41

True's Beaked Whale [Atlantic (northeast, northwest, southeast, western central), Indian Ocean (eastern)]

### Mesoplodon pacificus 41

Indo-Pacific Beaked Whale Australia, Somalia [Indian Ocean (western), Pacific (western central)]

# Mesoplodon peruvianus 41

Lesser Beaked Whale [Pacific (southeast)]

# Mesoplodon stejnegeri 41

Stejneger's Beaked Whale [Pacific (eastern central, northeast, northwest)]



Tasmacetus shepherdi <sup>41</sup>
Shepherd's Beaked Whale
[Atlantic (southwest), Indian Ocean
(eastern), Pacific (southeast,
southwest)]

Ziphius cavirostris 41
Cuvier's Beaked Whale
[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Indian Ocean (eastern, western), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

### Order ARTIODACTYLA

### Family CERVIDAE

Cervus mariannus 597 Philippine Brown Deer Guam [int], Japan [int] (Ogasawara-gunto), Northern Marianas [int], Philippines

Elaphodus cephalophus 59 Tufted Deer China, Myanmar

Hippocamelus antisensis 59 North Andean Deer Argentina, Bolivia, Chile, Ecuador (ex?). Penu

Argentina, Bolivia, Chile, Ecuador (ex?), Peru Mazama chunyi <sup>59</sup> Chunyi Bolivia, Peru

Muntiacus feai <sup>39</sup>
Fea's Muntjac
China, Laos, Myanmar, Thailand,
Viet Nam

Muntiacus gongshanensis <sup>59</sup> Gongshan Muntjac China, India, Myanmar?

# Order RODENTIA

### Family SCIURIDAE

Spermophilus townsendii 82 Townsend's Ground Squirrel USA

# Family DIPODIDAE

Salpingotus thomasi 15 Afghanistan?

Sicista kazbegica 173 Georgia, Russia

Sicista kluchorica 173 Russia

Sicista pseudonapaea 173 Russia

### Family MURIDAE

Apodemus alpicola 8
Alpine Mouse
Austria, France, Italy, Switzerland

Apodemus hyrcanicus 173 Russia

Arborimus albipes \*2
White-footed Vole
USA

Arborimus pomo 82 California Red Tree Mouse USA

Batomys dentatus 86 Philippines

Carpomys melanurus 86 Philippines

Carpomys phaeurus 86 Philippines

Dicrostonyx exsul 82
St. Lawrence Id Collared Lemming
USA

Dicrostonyx nunatakensis 82 Ogilvie Mtns Collared Lemming Canada

Lemniscomys hoogstraali 169 Sudan

Lophuromys cinereus 169 Zaire

Microtus abbreviatus 82 Insular Vole USA

Mus mattheyi 169 Ghana

Oenomys hypoxanthus 169
Angola, Burundi, Cameroon, Congo,
Equatorial Guinea, Ethiopia, Gabon,
Kenya, Nigeria, Rwanda, Sudan,
Tanzania, Uganda, Zaire

Oryzomys melanotis 15 Mexico

Oryzomys spodiurus 48 Ecuador

Praomys jacksoni 169
Angola, Burundi, Cameroon, Central
African Republic, Gabon, Kenya,
Nigeria, Rwanda, Sudan, Tanzania,
Uganda, Zaire, Zambia

Praomys montis 169 Kenya

Praomys peromyscus 169 Kenya

Rattus timorensis 15 Malaysia Rhabdomys pumilio 169

Angola, Botswana, Kenya, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda, Zaire, Zambia, Zimbabwe

### Family DASYPROCTIDAE

Dasyprocta cristata 15 Suriname

Dasyprocta kalinowskii 15 Peru

### Family ECHIMYIDAE

Echimys rhipidurus 15
Peru

Isothrix pictus 48 Brazil

Mesomys didelphoides 15 Brazil

Mesomys obscurus 15 Brazil

### Order LAGOMORPHA

# Family OCHOTONIDAE

Ochotona gaoligongensis 104 Gaoligong Pika China

Ochotona muliensis 104 Muli Pika China

### Family LEPORIDAE

Lepus fagani 104 Ethiopian Hare Ethiopia

### Class AVES

# Order TINAMIFORMES

### Family TINAMIDAE

Tinamus osgoodi 21 Black Tinamou Colombia, Peru

# Order PROCELLARIIFORMES

# Family HYDROBATIDAE

Oceanites gracilis 21 White-vented Storm-petrel Chile, Ecuador

Oceanodroma hornbyi 21 Ringed Storm-petrel Chile, Peru Oceanodroma markhami <sup>21</sup> Markham's Storm-petrel Peru

Oceanodroma matsudairae 21 Matsudaira's Storm-petrel Japan

#### Order PELECANIFORMES

Family

# **PHALACROCORACIDAE**

Phalacrocorax kenyoni 21 Kenyon's Shag USA

#### Order FALCONIFORMES

### Family ACCIPITRIDAE

Erythrotriorchis buergersi <sup>21</sup> Chestnut-shouldered Goshawk Indonesia, Papua New Guinea

Spilornis kinabaluensis 21 Mountain Serpent-eagle Brunei, Indonesia, Malaysia

#### Order GALLIFORMES

# Family PHASIANIDAE

Francolinus nahani 21 Nahan's Francolin Uganda, Zaire

# Order GRUIFORMES

# Family RALLIDAE

Coturnicops notatus 21 Speckled Crake Argentina, Brazil, Colombia, Guyana, Paraguay, Uruguay, Venezuela

Megacrex inepta <sup>21</sup> New Guinea Flightless Rail Indonesia, Papua New Guinea

Rallina leucospila 21 White-striped Forest-rail Indonesia

Rallina mayri 21 Mayr's Forest-rail Indonesia, Papua New Guinea

### Order CUCULIFORMES

# Family CUCULIDAE

Cacomantis heinrichi 21 Moluccan Cuckoo Indonesia

Chrysococcyx rufomerus 21
Green-cheeked Bronze-cuckoo
Indonesia

### Order STRIGIFORMES

### Family TYTONIDAE

Tyto inexspectata 21 Minahassa Masked-owl Indonesia

Tyto sororcula 21 Lesser Masked-owl Indonesia

# Family STRIGIDAE

Uroglaux dimorpha 21 Papuan Hawk-owl Indonesia, Papua New Guinea

#### Order CAPRIMULGIFORMES

### Family PODARGIDAE

Batrachostomus auritus <sup>21</sup> Large Frogmouth Brunei, Indonesia, Malaysia, Thailand

Batrachostomus harterti 21 Dulit Frogmouth Indonesia, Malaysia

Batrachostomus mixtus <sup>21</sup> Bornean Frogmouth Indonesia, Malaysia

Batrachostomus poliolophus 21 Short-tailed Frogmouth Indonesia

### Family CAPRIMULGIDAE

Caprimulgus maculosus 21
Cayenne Nightjar
French Guiana
Caprimulgus pulchellus 21

Caprimulgus pulchellus 21 Salvadori's Nightjar Indonesia

#### Order APODIFORMES

### Family APODIDAE

Apus sladeniae <sup>21</sup>
Fernando Po Swift
Angola, Cameroon, Equatorial
Guinea, Nigeria
Collocalia orientalis <sup>21</sup>

Mayr's Swiftlet Papua New Guinea, Solomon Islands

Cypseloides storeri 21 White-fronted Swift Mexico

# Family TROCHILIDAE

Popelairia letitiae 21 Coppery Thorntail Bolivia?

# Order CORACIIFORMES

### Family ALCEDINIDAE

Clytoceyx rex <sup>21</sup>
Shovel-billed Kookaburra
Indonesia, Papua New Guinea
Tanysiptera hydrocharis <sup>21</sup>
Little Paradise-kingfisher
Indonesia, Papua New Guinea

#### Order PASSERIFORMES

### Family FORMICARIIDAE

Clytoctantes atrogularis 21 Rondônia Bushbird Brazil

Pithys castanea 21 White-masked Antbird Peru

### Family HIRUNDINIDAE

Progne sinaloae 21 Sinaloa Martin Mexico

### Family PYCNONOTIDAE

Pycnonotus nieuwenhuisii 21 Blue-wattled Bulbul Brunei, Indonesia

### Family MUSCICAPIDAE

Androphobus viridis 21 Papuan Whipbird Indonesia, Papua New Guinea

Apalis kaboboensis 21 Kabobo Apalis Zaire

Batis minima<sup>21</sup>
Gabon Batis
Cameroon, Gabon

Bradypterus grandis 21 Dja River Warbler Cameroon, Gabon

Cisticola restrictus 21 Tana River Cisticola Kenya, Somalia?

Garrulax austeni 21 Brown-capped Laughingthrush India, Myanmar

Malurus campbelli 21 Campbell's Fairywren Papua New Guinea

Megalurulus grosvenori 21 Bismarck Thicketbird Papua New Guinea

Megalurulus llaneae 21 Bougainville Thicketbird Papua New Guinea



Monarcha menckei 21 White-breasted Monarch Papua New Guinea

Muscicapa segregata<sup>21</sup> Sumba Brown Flycatcher Indonesia

Petroica archboldi <sup>21</sup> Snow Mountain Robin Indonesia

Poecilodryas placens 21 Olive-yellow Robin Indonesia, Papua New Guinea

Prinia fluviatilis <sup>21</sup> River Prinia Cameroon, Chad, Mali, Niger, Senegal

Rhipidura matthiae 21 Matthias Fantail Papua New Guinea

Zoothera dumasi 21 Moluccan Thrush Indonesia

# Family DICAEIDAE

Melanocharis arfakiana 21 Obscure Berrypecker Indonesia, Papua New Guinea

# Family ZOSTEROPIDAE

Zosterops meeki 21 White-throated White-eye Papua New Guinea

# Family MELIPHAGIDAE

Lichmera notabilis 21 Black-chested Honeyeater Indonesia

Meliphaga vicina <sup>21</sup> Tagula Honeyeater Papua New Guinea

Myzomela albigula 21 White-chinned Myzomela Papua New Guinea

Myzomela kuehni <sup>21</sup> Crimson-hooded Myzomela Indonesia

Philemon brassi 21
Brass's Friarbird
Indonesia

Philemon fuscicapillus <sup>21</sup> Dusky Friarbird Indonesia

Philemon kisserensis 21 Grey Friarbird Indonesia

### Family FRINGILLIDAE

Carpodacus roborowskii 21 Tibetan Rosefinch China

Leucosticte sillemi 21 Sillem's Mountain-finch China

Loxia scotica 21 Scottish Crossbill United Kingdom

# Family PLOCEIDAE

Ploceus victoriae 21 Entebbe Weaver Uganda

# Family ORIOLIDAE

Sphecotheres hypoleucus 21 Wetar Figbird Indonesia

# Family CRACTICIDAE

Cracticus louisiadensis 21 Tagula Butcherbird Papua New Guinea

# Family PARADISAEIDAE

Loboparadisea sericea 21 Yellow-breasted Bird-of-paradise Indonesia, Papua New Guinea

### Class REPTILIA

# Order CROCODYLIA

### Family CROCODYLIDAE

Crocodylus cataphractus 55
African Slender-snouted Crocodile
Angola, Benin, Burkina Faso,
Cameroon, Central African Republic,
Chad, Congo, Côte d'Ivoire,
Equatorial Guinea, Gabon, Gambia
(ex?), Ghana, Guinea, Guinea-Bissau
(ex?), Liberia, Mali, Mauritania,
Nigeria, Senegal (ex?), Sierra Leone,
Tanzania, Togo, Zaire, Zambia

Crocodylus moreletii 55
Morelet's Crocodile
Belize, Guatemala, Mexico
Tomistoma schlegelii 55
False Gharial

Indonesia, Malaysia, Myanmar?, Thailand (ex?)

# Order SAURIA

# Family AGAMIDAE

Gonocephalus abbotti 185 Abbott's Crested Lizard Thailand Hydrosaurus pustulatus 185 Sail-fin Lizard Philippines

# Family ANGUIDAE

Celestus duquesneyi 74 Jamaica

Celestus fowleri 74
Jamaica
Celestus microblepharis 74
Jamaica

Family GEKKONIDAE

Phyllodactylus melanostictus 185

Scarce Ground Gecko
Thailand

Phyllodactylus peringueyi 185 Peringueyi's Leaf-toed Gecko South Africa?

# Family IGUANIDAE

Liolaemus constanzae 185 Chile

Liolaemus curis 185 Chile

Liolaemus donosoi 185 Chile

Liolaemus fuscus 185 Argentina, Chile

Liolaemus gravenhorsti 185 Chile

Liolaemus hellmichi 185 Chile

Liolaemus kuhlmanni 185 Chile

Liolaemus lemniscatus 185 Argentina, Chile

Liolaemus leopardinus 185 Chile

Liolaemus lorenzmuelleri 185 Chile

Liolaemus lutzae 185 Brazil

Liolaemus nitidus 185 Chile

Liolaemus paulinae 185 Chile

Liolaemus walkeri 185 Chile

Liolaemus zapallarensis 185 Chile

Pristidactylus alvaroi 185 Chile

Pristidactylus valeriae 185 Chile

Tropidurus tarapacensis 185 Chile

### Family LACERTIDAE

Lacerto alpina 65 Georgia, Russia

### Family SCINCIDAE

Barkudia insularis 185 Legless Skink India

Isopachys gyldenstolpei 185 Gyldenstolpe's Worm Skink Thailand

Lygosoma haroldyoungi 185 Banded Supple Skink Thailand

Lygosoma koratense 185 Korat Supple Skink Thailand

Oligosoma gracilicorpus 14 Narrow-bodied Skink New Zealand

Phoboscincus bocourti 14 New Caledonia

Tribolonotus ponceleti 14 Solomon Islands

# Family TEIIDAE

Callopistes maculatus 185 Chile

Cnemidophorus hyperythrus 185 Orange-throated Whiptail Mexico, USA

### Order SERPENTES

#### Family ANILIDAE

Anomochilus leonardi 185 Leonard's Pipe Snake Malaysia

### Family COLUBRIDAE

Calamaria pfefferi 185 Pfeffer's Reed Snake Japan

Elachistodon westermanni 185 Indian Egg-eating Snake Bangladesh, India, Nepal

Elaphe situla 65
Leopard Snake
Albania, Bulgaria, Greece, Italy,
Malta, Turkey, Ukraine, Yugoslavia

Oligodon nikhili 185 India

Opisthotropis spenceri 185 Smith's Mountain Keelback Thailand

Parahelicops boonsongi 185 Boonsong's Keelback Thailand Pareas iwasakii 185

Iwasaki's Snail-eater Japan (Nansei-shoto)

Philodryas chamissonis 185 Chile

Thomnophis hammondi 15 Two-striped Garter Snake Mexico, USA

Xenocalamus transvaalensis 185 Transvaal Quillsnout Snake Mozambique, South Africa

### Family ELAPIDAE

Naja oxiana 186 Central Asian Cobra Afghanistan, India, Iran, Kyrgyzstan?, Pakistan, Tajikistan, Turkmenistan, Uzbekistan

### Family VIPERIDAE

Trimeresurus cornutus 185 Viet Nam

### Order TESTUDINES

# Family CHELIDAE

Chelodina reimanni 176 Reimann's Snake-necked Turtle Indonesia, Papua New Guinea

Elseya sp. 2 176
Manning River Snapping Turtle
Australia

Elseya sp. 3 176
Bellinger River Snapping Turtle
Australia

# Family EMYDIDAE

Chinemys nigricans 176 Red-necked Pond Turtle China, Viet Nam?

Cuora aurocapitata 176
Yellow-headed Box Turtle
China

Cuora mccordi 176
McCord's Box Turtle
China

Cuora pani 176
Pan's Box Turtle
China

Cuora yunnanensis 176 Yunnan Box Turtle China

Cuora zhoui 176 Zhou's Box Turtle China

Geoemyda yuwonoi <sup>176</sup> Sulawesi Forest Turtle Indonesia Kachuga sylhetensis 176 Assam Roofed Turtle Bangladesh, India

Mauremys iversoni 176
Fujian Pond Turtle
China

Melanochelys trijuga 176
Indian Black Turtle
Bangladesh, British Indian Ocean
Territory, India, Maldives, Myanmar,
Nepal, Sri Lanka

Notochelys platynota 176
Malayan Flat-shelled Turtle
Brunei, Indonesia, Malaysia,
Myanmar?, Thailand, Viet Nam

Ocadia glyphistoma 176 China

Ocadia philippeni 176
Philippen's Striped Turtle
China

Sacalia pseudocellata 176 Chinese False-eyed Turtle China

Terrapene nelsoni 176 Spotted Box Turtle Mexico

# Family PELOMEDUSIDAE

Pelusios upembae 176 Upemba Mud Turtle Zaire

# Family PLATYSTERNIDAE

Platysternon megacephalum 176
Big-headed Turtle
China, Laos, Myanmar, Thailand,
Viet Nam

# Family TESTUDINIDAE

Kinixys erosa <sup>176</sup>
Serrated Hinge-back Tortoise
Angola, Benin, Cameroon, Central
African Republic, Congo, Côte
d'Ivoire, Equatorial Guinea, Gabon,
Gambia, Ghana, Guinea, Liberia,
Nigeria, Rwanda?, Sierra Leone,
Togo?, Uganda, Zaire

Kinixys homeana <sup>176</sup>
Home's Hinge-back Tortoise
Benin?, Cameroon, Côte d'Ivoire,
Equatorial Guinea, Ghana, Guinea,
Liberia, Nigeria, Togo?

# Family TRIONYCHIDAE

Lissemys scutata 176
Burmese Flapshell Turtle
Myanmar



### Class AMPHIBIA

#### Order ANURA

### Family BUFONIDAE

Bufo atacamensis 185 Chile

Bufo chilensis 185 Chile

# Family HYLIDAE

Hyla albolineata 185 Brazil

Hyla izecksohni 185 Brazil

Hyla langei 185 Brazil

Hyla secedens 185 Brazil

Phrynomedusa fimbriata 185 Brazil

# Family LEPTODACTYLIDAE

Alsodes barrioi 185 Chile

Alsodes montanus 185 Chile

Alsodes nodosus 185 Chile

Alsodes tumultuosos 185 Chile

Alsodes vanzolinii 185 Chile

Caudiverbera caudiverbera 185 Chile

Eleutherodactylus eneidae 185

Puerto Rico

Eleutherodactylus jasperi 185

Golden Coqui Frog Puerto Rico

Eleutherodactylus semipalmatus 185 Haiti

Eupsophus insularis 185 Chile

Leptodactylus marambaiae 185 Brazil

Telmatobius halli 185 Chile

Telmatobius pefauri 185 Chile

Telmatobius peruvianus 185 Chile Telmatobius zapahuirensis 185 Chile

Telmatobufo australis 185 Chile

Telmatobufo bullocki 185 Chile

Telmatobufo venustus 185 Chile

### Family MICROHYLIDAE

Hyophryne histrio 185 Brazil

# Family MYOBATRACHIDAE

Uperoleia orientalis 14 Alexandra Toadlet Australia

# Family RANIDAE

Cacosternum poyntoni 185 Poynton's Caco South Africa

Rana aenea 185 Doichang Frog Thailand

Rana fasciculispina 185
Spiny-breasted Giant Frog
Thailand

Rana kohchangae 185 Kohchang Frog Thailand

Rana pyrenaica 65 Spain

Rana tasanae 185 Smith's Wrinkled Frog Thailand

### Family RHINODERMATIDAE

Rhinoderma darwinii 185 Darwin's Toad Chile

Rhinoderma rufum 185 Chile

#### Order CAUDATA

### Family CRYPTOBRANCHIDAE

Andrias davidianus 185 Chinese Giant Salamancier China, Taiwan [int]

### Family HYNOBIIDAE

Hynobius stejnegeri 185 Amber-coloured Salamander Japan

### Family PLETHODONTIDAE

Plethodon larselli 75 Larch Mountain Salamander USA

Typhlotriton spelaeus 75 Grotto Salamander USA

### Family SALAMANDRIDAE

Neurergus crocatus 65 Turkey

Neurergus strauchi 65 Turkey

Triturus dobrogicus 65
Austria, Bosnia and Herzegovina?,
Bulgaria, Czech Republic, Hungary,
Romania, Russia?, Ukraine?,
Yugoslavia

### Class

# **CEPHALASPIDOMORPHI**

# Order PETROMYZONTIFORMES

# Family PETROMYZONTIDAE

Eudontomyzon mariae 185
Ukranian Brook Lamprey
Austria, Belarus?, Bulgaria, Czech
Republic, Georgia?, Hungary,
Moldova?, Poland, Romania, Russia,
Slovakia, Turkey?, Ukraine,
Yugoslavia

Lampetra macrostoma 185 Lake Lamprey Canada

Mordacia lapicida 185 Chile

#### Class ELASMOBRANCHII

# Order ORECTOLOBIFORMES

### Family RHINCODONTIDAE

Rhincodon typus 68
Whale Shark
[Atlantic (eastern central, southeast, southwest, western central), Indian

[Attantic (eastern central, southeast, southeast, western central), Indian Ocean (eastern, western), Pacific (eastern central, northwest, southeast, southeast, western central)]

### Order RAJIFORMES

Family RAJIDAE

Bathyraja abyssicola 51 Deepsea Skate [Pacific (northeast, northwest)]

### Class ACTINOPTERYGII

# Order OSTEOGLOSSIFORMES

# Family OSTEOGLOSSIDAE

Arapaima gigas 185 Pirarucu Brazil, Guyana, Peru

### Order CLUPEIFORMES

#### Family CLUPEIDAE

Alosa alosa 185

Allis Shad

Algeria, Belgium, Denmark, France, Germany, Ireland, Italy?, Morocco, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland (ex), United Kingdom

# Alosa fallax 185

Twaite Shad

wante Shau Albania, Algeria, Belgium, Croatia, Cyprus?, Denmark, Estonia, Finland, France, Germany, Gibraltar?, Greece, Ireland, Israel?, Italy, Latvia, Lebanon?, Lithuania, Malta?, Morocco, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Syria?, Tunisia, Turkey, United Kingdom, Yugoslavia

# Alosa maeotica 185

Bulgaria, Georgia, Moldova?, Romania, Russia, Turkey, Ukraine

Alosa pontica 185

Azerbaijan, Bulgaria, Croatia, Georgia, Hungary, Iran?, Kazakhstan?, Moldova, Romania, Russia, Slovenia?, Turkey, Turkmenistan, Ukraine, Yugoslavia

### Clupeoides papuensis 5

Toothed River Herring Indonesia, Papua New Guinea

Clupeonella abrau 185 Russia, Turkey

Clupeonella cultriventris <sup>185</sup> Azerbaijan?, Bulgaria, Georgia, Iran?, Kazakhstan?, Moldóva, Romania, Russia, Turkey, Turkmenistan?, Ukraine

### Family ENGRAULIDAE

Thryssa scratchleyi 179
Freshwater Anchovy
Australia

### Order CYPRINIFORMES

### Family CYPRINIDAE

Aaptosyax grypus 101 Laos, Thailand

### Acanthorutilus meandricus 185 Turkey

Alburnus heckeli 185 Turkey

Aspius aspius 185

Asp

Afghanistan, Armenia, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Kazakhstan, Latvia, Lithuania, Macedonia?, Moldova, Poland, Romania, Slovakia, Slovenia?, Sweden, Turkey, Turkmenistan, Ukraine, Uzbekistan?, Yugoslavia

Barbus albanicus 185 Albania?, Greece

Barbus cyclolepis 185

Armenia?, Azerbaijan?, Georgia?, Greece, Iran?, Russia?, Turkey?, Ukraine?

Barbus graceus 185 Albania, Greece

Barbus peloponnesius 185 Albania?, Greece, Macedonia?

Capoeta antalyensis 185 Turkey

#### Chalcalburnus chalcoides 185 Danube Bleak

Austria, Bosnia and Herzegovina?, Bulgaria, Croatia, Germany, Hungary, Italy, Romania, Yugoslavia [R. Danube]

# Chalcalburnus tarichi 185

Turkey [L. Van]

# Chondrostoma kneri 185

Dalmation Nase

Bosnia and Herzegovina?, Croatia

#### Chondrostoma phoxinus 185

Minnow-Nase

Bosnia and Herzegovina?, Croatia

# Cyprinus carpio 185

Wild Common Carp

Austria, Bulgaria, Croatia, Hungary, Austria, Bulgaria, Croatia, Hungary, Kazakhstan, Mongolia?, Romania, Russia, Slovakia, Slovenia, Turkmenistan?, Ukraine, Uzbekistan, Yugoslavia

# Danio aequipinnulus 134

Sri Lanka

Garra phillipsi <sup>134</sup> Philipps' Garra Sri Lanka

### Gabia albipinnatus 185

White-finned Gudgeon

Austria, Bosnia and Herzegovina?, Bulgaria, Croatia, Czech Republic?, Hungary, Moldova, Romania, Russia, Slovakia?, Ukraine, Yugoslavia

# Gobio kessleri 185

Kessler's Gudgeon

Austria, Bulgaria, Croatia, Czech Republic, Hungary, Moldova, Poland?, Romania, Slovakia, Slovenia, Ukraine, Yugoslavia

# Gobia uranoscopus 185

Danube Gudgeon

Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Italy?, Romania, Slovakia, Slovenia, Ukraine, Yugoslavia [R. Danube]

# Hemitremia flammea 75

Flame Chub USA

Leucaspius irideus 185 Turkey

# Leuciscus borysthenicus 185

Black Sea Chub

Bulgaria, Georgia, Greece?, Moldova, Romania, Russia, Turkey, Ukraine

### Leuciscus cephaloides 185 Turkey

Notropis hubbsi 15 Bluehead Shiner USA

Notropis jemezanus 75 Rio Grande Shiner

Mexico, USA

Notropis oxyrhynchus 75

Sharpnose Shiner

### Notropis semperasper 75 Roughhead Shiner USA

Notropis welaka 75 Bluenose Shiner USA

USA

Pachychilon macedonicus 185 Greece

#### Paraphoxinus adspersus 185 Croatia

Paraphoxinus epiroticus 185 Albania, Greece, Macedonia

Paraphoxinus minutus 185 Albania

# Paraphoxinus pstrossi 185 Albania, Croatia

[R. Trebisnjica]
Pelecus cultratus 185

#### Ziege

Austria, Azerbaijan?, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Georgia?,



Germany, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Sweden, Turkey, Turkmenistan, Ukraine, Yugoslavia

Phoxinellus crassus <sup>185</sup> Turkey Phoxinus percnurus <sup>185</sup>

Swamp Minnow Belarus, Estonia, Germany, Latvia, Lithuania, Poland, Russia, Ukraine

Probarbus labeamajor 101 Cambodia, Laos, Thailand

Probarbus labeaminor 101 Laos, Thailand

Pseudophoxinus irideus 185 Turkey

Puntius cataractae 185
Philippines
[L. Lanao]

Rutilus frisii 185 Black Sea Roach Armenia, Azerbaijan, Bulgaria, Georgia, Iran?, Kazakhstan?, Moldova, Romania, Russia, Turkey, Ukraine

Rutilus pigus 185
Danube Roach
Austria, Bulgaria, Czech Republic,
Germany, Hungary, Italy, Romania,
Slovenia, Ukraine?
[R. Danube]

Rutilus ylikiensis 185 Greece

Scardinius racovitzai 185 Turkey

Semotilus lumbee 75 Sandhills Chub USA

Tropidophoxinellus hellenicus 185

Tropidophoxinellus spartiaticus 185 Greece

Tylognathus klatti 185 Turkey

# Family COBITIDAE

Cobitis elongata 185
Balkan Loach
Austria, Bosnia and Herzegovina,
Bulgaria, Croatia, Hungary,

Bulgaria, Croatia, Hungary, Romania, Slovenia, Turkey, Yugoslavia

Cobitis hellenica 185 Greece

Cobitis marrocana 101
Morocco

Cobitis megaspila 185 Bulgaria?, Moldova?, Romania

Cobitis romanica 185 Romanian Loach Bulgaria?, Romania

Cobitis stephanidisi 185 Greece

Cobitis strumicae 185 Greece

Cobitis trichonica 185 Greece

Cobitis vardarensis 185 Greece

Leptobotia curta 101 Ayumodoki China, Japan

Sabanjewia aurata 185
Goldside Loach
Albania, Armenia, Austria,
Azerbaijan, Bosnia and Herzegovina,
Bulgaria, Croatia, Czech Republic,
Greece, Hungary, Iran, Moldova,
Romania, Russia, Slovakia, Slovenia,
Turkey, Ukraine, Yugoslavia

### Family BALITORIDAE

Barbatula brandti 101 Georgia, Turkey

Barbatula bureschi 101 Greece, Turkey

Barbatula pulsiz 185 Turkey

Indoreonectes evezardi 185 India

Nemacheilus angorae 185 Israel, Jordan, Lebanon, Syria, Turkey

Nemacheilus lendi 185 Turkey

Troglocobitis starostini 185
Turkmenistan

Turcinemacheilus kosswigi 185 Turkey

# Family CATOSTOMIDAE Moxostoma congestum 75

Gray Redhorse Mexico, USA Scartomyzon ariomus 75 Bigeye Jumprock USA

### Order CHARACIFORMES

Family CHARACIDAE

Catabasis acuminatus 185

Brazil

Cheirodon australe 185 Chile

Cheirodon galusdae 185 Chile

Cheirodon kiliani 185 Chile

Cheirodon pisciculus 185 Chile

Stygichthys typhlops 185 Brazil

#### Order SILURIFORMES

Family DIPLOMYSTIDAE

Diplomystes camposensis 185 Chile

Diplomystes nahuelbutensis 185 Chile

# Family ICTALURIDAE

Ictalurus australis 49 Bagre del Panuco Mexico

Ictalurus lupus 75 Bagre Lobo Mexico, USA

Noturus furiosus 75 Carolina Madtom USA

# Family BAGRIDAE

Austroglanis sclateri 158 Rock-catfish South Africa

Pardiglanis tarabinii <sup>185</sup> Giant Catfish Somalia [R. Jubba]

### Family SILURIDAE

Siluris aristotelis 185 Aristotle's Catfish Greece

Silurus furness 185 Malaysia

# Family PANGASIIDAE

Pangasius sanitwongsei 101 Pla Thepa Cambodia, Laos, Thailand, Viet Nam

### Family ARIIDAE

Ancharius brevibarbus <sup>168</sup> Vaona Madagascar Ancharius fuscus <sup>168</sup> Vaona Madagascar Arius taylori 5 Taylor's Catfish Indonesia, Papua New Guinea

Cinetodus froggatti 179 Froggatt's Catfish Australia

Tetranesodon conorhynchus 5 Lorentz Catfish Indonesia

### Family PIMELODIDAE

Caecorhamdella brasilensis 185 Brazil

Pimelodella kronei 185 Brazil

### Family TRICHOMYCTERIDAE

Bullockia maldonadoi 185 Chile

Eremophilus mutisii 185 Colombia

Nematogenys inermis 185 Chile

Phreatobius cisternatum 185 Brazil

Trichomycterus areolatus 185

Trichomycterus chaberti 185 Bolivia

Trichomycterus chiltoni 185 Chile

#### Order SALMONIFORMES

### Family OSMERIDAE

Osmerus eperlanus 185

Smelt

Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Latvia, Lithuania, Netherlands, Norway, Poland, Russia, Spain, Sweden, United Kingdom

Osmerus spectrum 75 Pygmy Smelt Canada, USA

# Family GALAXIIDAE

Aplochiton marinus 185 Chile

Brachygalaxias bullocki 185 Chile

Brachygalaxias gothei 185 Chile

Galaxias globiceps 185 Chile

Galaxias parvus 179 Swamp Galaxias Australia Neochanna diversus 185 Black Mudfish New Zealand

### Family SALMONIDAE

Coregonus albula 185

Vendace

Belarus?, Czech Republic [int], Denmark, Estonia, Finland, France [int], Germany, Ireland, Latvia, Lithuania, Norway, Poland, Russia, Slovakia [int], Sweden, United Kingdom

Coregonus baunti 101 Russia

Coregonus lavaretus 185
Austria, Belarus?, Czech Republic, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Norway, Poland, Romania, Russia, Sweden, Switzerland, Ukraine, United Kingdom

Coregonus nasus 185
Large Bottom Whitefish
Austria, Canada, Denmark, Estonia,
Finland, Germany, Latvia, Lithuania,
Poland, Russia, Sweden,
Switzerland, USA

Coregonus oxyrinchus 185

Houting

Belgium, Denmark, Estonia, Finland, Germany, Ireland, Latvia, Lithuania, Luxembourg?, Netherlands, Norway, Poland, Russia, Sweden, United Kingdom

Coregonus peled 185 Northern Whitefish Finland, Russia, Sweden

Coregonus pidschian 185
Bottom Whitefish
Canada, Finland, Russia, Sweden,

Coregonus trybomi 101 Finland, Sweden

Oncorhynchus iwame 101 Iwame Trout

Japan
Salmo dentex 185

Croatia, Yugoslavia

Salmo marmoratus 185 Albania, Croatia, Italy, Slovenia, Yugoslavia

Salmo montenegrinus 185 Albania, Yugoslavia

Salvelinus anaktuvukensis <sup>75</sup> Angayukaksurak Char USA

Stenodus leucichthys 185 Azerbaijan, Canada, Kazakhstan, Russia, Turkmenistan, USA

#### Order OPHIDIIFORMES

Family BYTHITIDAE

Ogilbia galapagosensis 185 Ecuador (Galápagos ls)

### Order ATHERINIFORMES

### Family ATHERINIDAE

Atherina boyeri 185

Albania, Algeria, Croatia, Cyprus?, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Morocco, Slovenia?, Spain, Syria, Tunisia, Turkey, Yugoslavia

Austromenidia gracilis 185 Chile

Basilichthys microlepidotus 185 Chile

Bedotia geayi 168 Zona

Madagascar

Bedotia longianalis 168

Zona Madagascar

Bedotia madagascariensis 168 Zona

Madagascar

Chilatherina bulolo 185 Bulolo Rainbowfish Papua New Guinea

Chirostoma regani 49 Charal del Valle de Mexico Mexico

Craterocephalus marianae 185 Magela Hardyhead Australia

Craterocephalus pimatuae 5 Pima Hardyhead

Papua New Guinea

Glossolepis pseudoincisus 5 Tami River Rainbowfish Indonesia, Papua New Guinea

Glossolepis ramuensis 185 Ramu Rainbowfish Papua New Guinea

Melanotaenia ajamaruensis 5 Ajamaru Lakes Rainbowfish Indonesia

Melanotaenia angfa 5 Yakati Rainbowfish Indonesia

Melanotaenia corona 5 Corona Rainbowfish Indonesia

Melanotaenia exquisita 185
Exquisite Rainbowfish
Australia



Melanataenia herbertaxelradi 5 Lake Tebera Rainbowfish

Papua New Guinea

Melanotaenia monticola 185 Mountain Rainbowfish

Papua New Guinea

Melanataenia ogilbyi 185

Ogilby's Rainbowfish

Indonesia

Melanotaenia pimanensis 185

Pima River Rainbowfish Papua New Guinea

Melanotaenia praecox 5

Dwarf Rainbowfish

Indonesia

Melanotaenia sexlineata 5

Fly River Rainbowfish

Indonesia, Papua New Guinea Melanotaenia vanheurni 185

Van Heurn's Rainbowfish

Indonesia

Poblana ferdebueni 49 Mexico

Pseudomugil paskai 5

Paska's Blue-Eye

Indonesia, Papua New Guinea

Rheocles lateralis 168

Zona

Madagascar

[R. Nosivolo]

Rheocles pellegrini 168

Zona

Madagascar

Teramulus kieneri 168

Vily

Madagascar

### Order CYPRINODONTIFORMES

# Family APLOCHEILIDAE

Rivulus robustus 49

Rivulus Almirante

Mexico

# Family CYPRINODONTIDAE

Aphanius fasciatus 185

South European Toothcarp Albania, Algeria, Croatia, Cyprus, Egypt, France, Germany, Israel, Italy, Lebanon, Libya?, Malta?, Morocco, Slovenia, Syria, Tunisia,

Turkey, Yugoslavia

Aphanius iberus 185 Spanish Toothcarp

Algeria, Morocco?, Spain, Tunisia?

Kosswigichthys asquamatus 185 Scaleless Killifish

Turkey

Orestias cuvieri 185

Bolivia, Peru [L. Titicaca]

Orestias parinacotensis 185 Chile

[R. Lauca]

### Family POECILIDAE

Gambusia aestiputeus 185

Colombia (San Andrés Id)

Gambusia speciosa 75

**USA** 

Poecilia vetiprovidentiae 185

Colombia (Isla de Providencia)

Poeciliopsis monacha 49

Mexico

Xiphophorus clemenciae 49

Espada de Clemencia Mexico

#### Order BELONIFORMES

### Family HEMIRAMPHIDAE

Nomoramphus celebensis 101

Poso Halfbeak

Indonesia

[L. Poso]

Zenarchopterus alleni 5

Allen's River Garfish

Indonesia

### Order GASTEROSTEIFORMES

# Family PEGASIDAE

Eurypegasus draconis 178

Madagascar

[Indian Ocean (eastern, western),

Pacific (northwest, western central)]

Eurypegasus papilio 178

USA (Hawaiian Is)

[Pacific (eastern central)]

Pegasus lancifer 178

Australia

[Indian Ocean (eastern)]

Pegasus volitans 178

[Indian Ocean (eastern, western), Pacific (northwest, southwest,

western central)]

# Order SYNGNATHIFORMES

#### Family SYNGNATHIDAE

Doryrhamphus dactyliophorus 178

Banded Pipefish

[Indian Ocean (eastern, western), Pacific (northwest, western central)]

Hippocampus bargibanti 178

Australia, New Caledonia

[Pacific (western central)]

### Hippocampus breviceps 178 Short-headed Seahorse

Australia

Indian Ocean (eastern), Pacific

(southwest)]

# Hippocampus minotaur 178

Australia

[Indian Ocean (eastern), Pacific

(southwest)]

# Microphis caudocarinatus 5

Slender Pipefish

Indonesia

# Microphis spinachoides 5

Spinach Pipefish

Papua New Guinea

# Phycodorus eques 178

Leafy Seadragon

Australia

[Indian Ocean (eastern)]

### Phyllopteryx taeniolatus 178

Weedy Seadragon

Australia

[Indian Ocean (eastern), Pacific

(southwest)]

### Sygnathoides biaculeatus 178

Double-ended Pipefish

[Indian Ocean (eastern, western), Pacific (northwest, southwest,

western central)]

Syngnathus abaster 185

Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Morocco, Saudi Arabia, Slovenia?, Spain,

Sudan?, Syria, Tunisia, Turkey, Yugoslavia

Syngnathus nigrolineatus 185

Azerbaijan, Bulgaria, Georgia, Iran, Kazakhstan, Moldova, Romania, Russia, Turkey, Turkmenistan,

Ukraine

# Order SYNBRANCHIFORMES

### Family SYNBRANCHIDAE

Monopterus indicus 185 India

Ophisternon candidum 179

Blind Cave Eel Australia

# Family MASTACEMBELIDAE

Typhlosynbranchus baueti 185

Macrognathus aral 101

Spiny Eel

Liberia

India, Nepal, Pakistan, Sri Lanka (ex)

# Order SCORPAENIFORMES

Family COTTIDAE

Cottus princeps 75 Klamath Lake Sculpin USA

Cottus tenuis 75 Slender Sculpin USA

#### Order PERCIFORMES

### Family AMBASSIDAE

Ambassis agassizi 185 Agassiz's Perchlet Australia

Parambassis altipinnis 5 High-Finned Glass Perchlet Indonesia

Tetracentrum caudovittatus 5 Kokoda Glass Perchlet Papua New Guinea

# Family PERCICHTHYIDAE

Macquaria australasica 179
Macquarie Perch
Australia

Nannatherina balstoni 185 Balston's Pygmy Perch Australia

Percichthys melanops 185 Chile

Percilia gillissi 185 Chile

Percilla irwini 185 Chile

### Family SERRANIDAE

Epinephelus exsul 91
Ten-spine Grouper
[Pacific (eastern central)]

Mycteroperca rubra <sup>91</sup>
Comb Grouper
[Atlantic (eastern central),
Mediterranean and Black Sea]

### Family TERAPONTIDAE

Hannia greenwayi 179 Greenway's Grunter Australia

Hephaestus obtusifrons 185 Striped Grunter Indonesia, Papua New Guinea

Hephaestus trimaculatus 5 Threespot Grunter Papua New Guinea Scortum hilli 179 Leathery Grunter Australia

Scortum parviceps 179 Small-Headed Grunter Australia

# Family CENTRARCHIDAE

Micropterus treculi 75 Guadalupe Bass USA

# Family PERCIDAE

Etheostoma mariae 75 Pinewoods Darter USA

Gymnocephalus acerina 185
Belarus?, Hungary?, Moldova,
Poland?, Russia, Slovakia?, Ukraine

Gymnocephalus baloni 185

Balon's Ruffe
Austria, Bulgaria?, Czech Republic,
Germany, Hungary, Moldova?,
Romania, Slovakia, Yugoslavia
[R. Danube]

Perca schrenki 101
Balkhash Perch
China, Kazakhstan, Kyrgyzstan?

Stizostedion marinum 185
Azerbaijan, Bulgaria?, Iran,
Kazakhstan?, Moldova?, Romania?,
Russja?, Turkmenistan, Ukraine

Stizostedion volgensis 185 Volga Zander Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Moldova, Romania, Russia, Slovakia, Ukraine, Yugoslavia

### Family BLENNIIDAE

Entomacrodus cadenati 147 São Tomé & Príncipe [Atlantic (eastern central)]

### Family ELEOTRIDAE

Bostrichthys aruensis 185
Island Gudgeon
Indonesia

Bostrichthys zonatus 5 Barred Gudgeon Indonesia

Eleotris sandwicensis 75 Oopu USA

Milyeringa veritas 179 Blind Gudgeon Australia

# Oxyeleotris wisselensis 5

Paniai Gudgeon Indonesia

### Family GOBIIDAE

Awaous stamineus 75 Oopu Nakea

Bathygobius burtoni 147 São Tomé & Príncipe [Atlantic (eastern centnral)]

Benthophiloides braunei 185 Bulgaria, Romania, Russia?, Ukraine

Glossogobius hoesei 5 Hoese's Goby Indonesia

Gobius tigrellus 5 Tiger Goby Indonesia

Knipowitschia goerneri 185 Greece

Knipowitschia milleri 185 Greece

Knipowitschia panizzai 101 Albania, Greece, Italy, Yugoslavia

Lentipes concolor 75 Oopu Alamoo USA (Hawaiian Is)

Luciogobius albus 185 Japan

Luciogobius pallidus 185 Japan

Mesogobius batrachocephalus 185 Bulgaria, Georgia, Romania, Russia, Turkey, Ukraine

Neogobius fluviatilis 185 Bulgaria, Hungary, Moldova, Romania, Russia, Turkey, Ukraine, Yugoslavia

Neogobius gymnotrachelus 185 Bulgaria, Moldova, Romania, Russia, Turkey, Ukraine, Yugoslavia

Neogobius kessleri 185 Kessler's Goby

Austria, Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Moldova, Romania, Slovakia, Turkey, Ukraine, Yugoslavia (Serbia)

Neogobius melanostomus 185 Bulgaria, Georgia, Moldova?, Romania, Russia, Turkey, Ukraine

Neogobius syrman 185 Bulgaria, Moldova, Romania, Russia, Ukraine

Pomatoschistus canestrini 185 Canestrini's Goby Albania?, Croatia, Italy, Yugoslavia?



Schismatogobius deraniyagalai <sup>134</sup> Redneck Goby India, Sri Lanka

Sicyopterus halei 134 Red-tailed Goby Sri Lanka

Sicyopus jonklaasi 134 Lipstick Goby Sri Lanka

Zosterisessor opiocephalus 185 Albania, Algeria, Croatia, Cyprus, France, Greece, Italy, Malta, Morocco, Slovenia, Spain, Tunisia, Ukraine, Yugoslavia

### Family XIPHIIDAE

Xiphias gladius (C) 151 Swordfish

[Atlantic (eastern central, northeast, northwest, western central), Mediterranean and Black Sea, Pacific (eastern central, northwest, southeast, southwest, western central)]

# Family SCOMBRIDAE

Thunnus alalunga (C) 177 Albacore Tuna

[Atlantic (eastern central, northeast, northwest, southeast, southwest, western central), Mediterranean and Black Sea, Pacific (eastern central, northeast, northwest, western central)]

Thunnus thynnus (C) 151 Northern Bluefin Tuna

[Atlantic (eastern central, northeast, northwest, southwest, western central), Mediterranean and Black Sea, Pacific (eastern central, northwest)]

#### Order TETRAODONTIFORMES

### Family TETRAODONTIDAE

Lagocephalus gloveri 147 [Pacific (western central)]

Takifugu niphobles 147
[Pacific (northwest)]

Takifugu poecilonotus 147
[Pacific (northwest)]

Takifugu xanthopterus 147
[Pacific (northwest)]

Torguigener brevipinnis 147 [Pacific (western central)]

# Class ARACHNIDA

### Order ARANEAE

Family CTENIZIDAE

Cyclocosmia torreya <sup>185</sup> Torreya Trap-door Spider USA

### Family GNAPHOSIDAE

Cesonia irvingi 185 Key Gnaphosid Spider Bahamas, USA

### Family GRADUNGULIDAE

Spelungula cavernicola 185 Nelson Cave Spider New Zealand

### Family HEXATHELIDAE

Macrothele cretica 185 Greece

### Family LEPTONETIDAE

Neoleptoneta myopica 185 Tooth Cave Spider USA

# Family LYCOSIDAE

Lycosa ericeticola 185 Rosemary Wolf Spider USA

### Order PSEUDOSCORPIONIDA

Family NEOBISIIDAE

Tartarocreagris texana 185
Tooth Cave Pseudoscorpion
USA

### Class CRUSTACEA

# Order ANOSTRACA

Family STREPTOCEPHALIDAE

Streptocephalus kargesi 95 Mexico

# Order CALANOIDA

#### Family DIAPTOMIDAE

Argyrodiaptomus neglectus 145 Brazil

Diaptomus rostripes 145 Germany

Eudiaptomus chappuisi 145 Morocco Hemidiaptomus kummerloewei 145 Turkey

[Pool near L. llgaz]

Idiodiaptomus gracilipes 145 Brazil

[Pool at Itapura]

Mastigodiaptomus amatitlanensis 145 Guatemala

[L. Amatitlan]

Mastigodiaptomus montezumae 145 Mexico

Neutrodiaptomus formosus 145 Japan

Odontodiaptomus thomseni 145 Uruguay [Pool near L. Chau]

Onychodiaptomus louisianensis 145 USA

Skistodiaptomus bogalusensis 145 USA

Skistodiaptomus sinuatus 145 USA

Spelaeodiaptomus rouchi 145 France

Tropodiaptomus falcatus 145 Kenya

Tropodiaptomus madagascariensis

Madagascar

Tropodiaptomus palustris 145 Burundi, Zaire

Tropodiaptomus purpureus 145 Burundi

Tropodiaptomus worthingtoni 145 Uganda, Zaire

### Family TEMORIDAE

Epischura massachusettsensis 145 USA

### Order DECAPODA

### Family COENOBITIDAE

Birgus latro 62

Coconut Crab
American Samoa, Australia, British
Indian Ocean Territory, Christmas
Island, Cook Islands, Federated
States of Micronesia, Fiji, French
Polynesia, Guam, India (Andaman &
Nicobar Is), Indonesia, Japan
(Nansei-shoto, Ogasawara-gunto),
Kiribati, Malaysia, Marshall Islands,
Mauritius (ex), Nauru, New
Caledonia, Niue, Northern
Marianas, Palau, Papua New Guinea,
Philippines, Seychelles, Solomon

Islands, Taiwan, Tanzania, Thailand, Tokelau, Tonga, Tuvalu, Vanuatu, Western Samoa

### Family PARASTACIDAE

Astacoides betsileoensis 54 Orambanonga Madagascar

Astacoides caldwelli 54 Madagascar

Astacoides granulimanus 54 Orambato Madagascar

Astacoides madagascariensis 54 Madagascar Freshwater Crayfish Madagascar

Cherax nucifraga 54 Australia

Cherax parvus 54
Australia

# Order HARPACTICOIDA

# Family CANTHOCAMPTIDAE

Thermomesochra reducta 145 Malaysia

### Order ISOPODA

# Family ARMADILLIDAE

Echinodillo cavaticus 185 Australia

# Order THORACICA

Family BALANIDAE

Armatobalanus nefrens 185 USA

Balanus aquila 185 USA

#### Class INSECTA

#### Order HYMENOPTERA

Family MEGACHILIDAE

Chalicodoma pluto 185
Wallace's Giant Bee
Indonesia

#### Order LEPIDOPTERA

# Family HESPERIIDAE

Dalla octomaculata 185 Eight-Spotted Skipper Costa Rica, Panama

### Family LASIOCAMPIDAE

Eriogaster catax 185

Austria, Belgium, Bulgaria, Czech Republic, Germany, Hungary, Italy, Netherlands, Slovakia, Spain, Yugoslavia

# Family LYCAENIDAE

Poecilmitis pan 75 South Africa

### Family NYMPHALIDAE

Hypodryas maturna <sup>185</sup>
Scarce Fritillary
Austria, Belgium, Czech Republic?,
France, Germany, Greece, Hungary,
Kazakhstan?, Lithuania,
Luxembourg, Poland, Romania,
Russia, Sweden, Yugoslavia

Tirumala alba 105 China

### Family PAPILIONIDAE

Atrophaneura palu 75 Indonesia

Bhutanitis mansfieldi 75 Mansfield's Three-tailed Swallowtail China

Graphium aurivilliusi 75
Zaire

Luehdorfia chinensis 75 Chinese Luehdorfia China

Ornithoptera tithonus 75 Indonesia

Papilio antimachus 75 African Giant Swallowtail

Angola, Benin?, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea, Liberia, Nigeria, Rwanda, Sierra Leone, Togo?, Uganda, Zaire

Papilio aristor 75

Scarce Haitian Swallowtail Dominican Republic, Haiti

Papilio caiguanabus 75
Poey's Black Swallowtail
Cuba

Papilio garleppi 75
Bolivia, Brazil, French Guiana,
Guyana, Peru, Suriname

Papilio maroni 75 French Guiana

Papilio morondavana 75

Madagascan Emperor Swallowtail Madagascar Parides coelus 75 French Guiana

Parides hahneli 75

Hahnel's Amazonian Swallowtail Brazil

Parides klagesi 75 Venezuela

Parides pizarro 75 Brazil, Peru

Parides steinbachi 75 Bolivia

Teinopalpus aureus 75 Golden Kaiser-I-Hind China, Viet Nam?

# Family SATURNIIDAE

Graellsia isabelae 185 Spanish Moon Moth France, Spain

### Family SPHINGIDAE

Hyles hippophaes 185
Afghanistan?, Armenia?,
Azerbaijan?, China, France,
Georgia?, Germany, Greece, Iran,
Iraq?, Kazakhstan?, Kyrgyzstan?,
Mongolia, Pakistan?, Romania,
Spain, Switzerland, Syria,
Tajikistan?, Turkey, Turkmenistan?,
Uzbekistan?, Yugoslavia

Proserpinus proserpina 185
Willowherb Hawkmoth
Armenia?, Austria, Azerbaijan?,
Belgium, Bulgaria, France,
Germany, Greece, Hungary, Iran,
Iraq?, Italy, Kazakhstan?, Lebanon,
Morocco, Portugal, Spain,
Switzerland, Syria?, Turkey,
Turkmenistan?, Uzbekistan

#### Order ODONATA

### Family COENAGRIONIDAE

Aciagrion rarum 123 Angola

Ceriagrion mourae 123 Mozambique

Enallagma polychromaticum 123 South Africa

Pseudagrion quadrioculatum 123
Zaire

# Family LIBELLULIDAE

Aethiothemis watuliki 123 Congo

Anectothemis apicalis 123
Zaire

Congothemis longistyla 123
Zaire



Orthetrum rubens 123 South Africa

Urothemis luciana 123 South Africa

*Urothemis thomasi* <sup>123</sup>
Ethiopia, Oman, Saudi Arabia, Somalia

### Family PLATY CNEMIDIDAE

Metacnemis angusta 123 South Africa

### Order ORTHOPTERA

### Family GRYLLOTALPIDAE

Gryllotalpa major 125 Prairie Mole Cricket USA

### Family STENOPELMATIDAE

Deinacrida parva 185 Kaikoura Weta New Zealand

### Order PLECOPTERA

### Family EUSTHENIIDAE

Eusthenia nothofagi 185 Otway Stonefly Australia

#### Class MEROSTOMATA

# Order XIPHOSURA

### Family LIMULIDAE

Carcinoscorpius rotundicauda 185 Horseshoe Crab India, Indonesia, Malaysia, Philippines, Singapore, Thailand

Tachypleus gigas 185
Horseshoe Crab
India, Indonesia, Malaysia,
Singapore, Thailand

Tachypleus tridentatus 185 Horseshoe Crab China, Indonesia, Japan, Malaysia, Philippines, Taiwan, Viet Nam

# Class ONYCHOPHORA

### Order ONYCHOPHORA

### Family PERIPATIDAE

Mesoperipatus tholloni 122 Congo

# Class POLYCHAETA

#### Order EUNICIDA

### Family EUNICIDAE

Eunice viridis 185
Palolo Worm
[Pacific (western central)]

### Class BIVALVIA

### Order OSTREOIDA

### Family PECTINIDAE

Nodipecten magnificus 66 Ecuador (Galápagos Is)

### Order UNIONOIDA

### Family UNIONIDAE

Alasmidonta marginata 24 Canada, USA

Alasmidonta varicosa 24 Canada, USA

Epioblasma florentina 24 USA

Unio turtoni 154 France

#### Class GASTROPODA

#### Order ARCHAEOGASTROPODA

### Family HELICINIDAE

Ogasawarana arata 115 Japan (Ogasawara-gunto)

Ogasawarana capsula 115 Japan (Ogasawara-gunto)

Ogasawarana comes 115 Japan (Ogasawara-gunto)

Ogasawarana discrepans 115 Japan (Ogasawara-gunto)

Ogasawarana hirasei 115 Japan (Ogasawara-gunto)

Ogasawarana microtheca 115 Japan (Ogasawara-gunto)

Ogasawarana nitida 115 Japan (Ogasawara-gunto)

Ogasawarana ogasawarana 115 Japan (Ogasawara-gunto)

Ogasawarana optima 115 Japan (Ogasawara-gunto)

Sturanyella carolinarum 115 Federated States of Micronesia

Sturanyella epicharis 115 Federated States of Micronesia

### Family HYDROCENIDAE

Georissa biangulata 115 Guam

Georissa elegans 115 Guam

Georissa laevigata 115 Guam

Georissa rufula 115
Federated States of Micronesia

# Family NERITIDAE

Neritilia hawaiiensis 115 Anchialine Pool Snail USA (Hawaiian Is)

Neritina cristata 33 Cameroon, Côte d'Ivoire, Gabon, Sierra Leone

Neritina manoeli 71 São Tomé & Príncipe (Príncipe)

Neritina natalensis <sup>33</sup>
Kenya, Mozambique, Somalia, South
Africa, Tanzania

Theodoxus maresi 33 Algeria, Morocco

Theodoxus numidicus 33 Algeria, Morocco

Theodoxus transversalis 115
Austria, Bulgaria, Germany,
Hungary, Moldova, Romania,
Slovakia, Ukraine, Yugoslavia?

#### Family SKENEIDAE

Teinsotoma fernandesi 71 São Tomé & Príncipe (Príncipe)

Teinsotoma funiculatum 71 São Tomé & Príncipe (Príncipe)

#### Order BASOMMATOPHORA

#### Family GLACIDORBIDAE

Glacidorbis pawpela 139 Australia

Glacidorbis pedderi 139 Australia

### Family LYMNAEIDAE

Myxas glutinosa 115
Austria, Belarus, Belgium, Czech
Republic, Estonia, Finland,
Germany, Kazakhstan, Latvia,
Lithuania, Moldova, Netherlands,
Norway, Poland, Russia, Sweden,
Ukraine, United Kingdom

Family PHYSIDAE

Physella natricina 115 Snake River Physa Snail USA

Family PLANORBIDAE

Camptoceras hirasei 115 Japan

Camptoceras rezvoji 115 Japan

Order MESOGASTROPODA

Family ACICULIDAE

Acicula hausdorfi 154 Greece

Platyla maaseni 154 Yugoslavia

Platyla microspira 154 Italy, Romania

Platyla orthostoma 154 Bulgaria

Platyla peloponnesica 154 Greece

Family AMPULLARIDAE

Lanistes graueri 33 Zaire

Family ASSIMINEIDAE

Assiminea palauensis 115 Palau

Conacmella vagans 115
Japan (Ogasawara-gunto)

Heteropoma fulva 115 Guam

Heteropoma glabratum 115 Guam

Heteroponia pyramis 115 Guam

Heteropoma quadrasi 115 Guam

Heteropoma tuberculatum 115 Guam

Heteropoma turritum 115 Guam

Kubaryia pilikia 115° Palau

Omphalotropis albocarinata 115 Norfolk Island

Omphalotropis carolinensis 115 Federated States of Micronesia

Omphalotropis cheynei 115 Palau

Omphalotropis cookei 115 Guam, Northern Marianas Omphalotropis elegans 115 Guam

Omphalotropis elongatula 115 Guam

Omphalotropis erosa 115 Guam

Omphalotropis fragilis 115
Federated States of Micronesia

Omphalotropis gracilis 115 Guam

Omphalotropis guamensis (115) Guam

Omphalotropis howeinsulae 115 Australia

Omphalotropis laevigata 115 Guam

Omphalotropis laticosta 115 Guam

Omphalotropis latilabris 115 Guam

Omphalotropis mutica 115 Palau

Omphalotropis ochthogyra 115 Guam

Omphalotropis picta 115 Guam

Omphalotropis pilosa 115

Omphalotropis quadrasi 115 Guam

Omphalotropis semicostata 115 Guam

Omphalotropis striatapila 115 Palau

Omphalotropis submaritima 115 Guam

Omphalotropis suteri 115 Norfolk Island

Omphalotropis suturalis 115
Guam

Omphalotropis tumidula 115
Federated States of Micronesia

Paludinella semperi 115 Marshall Islands, Palau

Ponapella pihapiha 115 Federated States of Micronesia

Quadrasiella clathrata 115

Quadrasiella mucronata 115 Guam

Thaanumella angulosa 115
Federated States of Micronesia

Thaanumella cookei 115
Federated States of Micronesia

Wrayanna soluta 115
Federated States of Micronesia

Family BATILLARIDAE

Batillaria mutata 66
Ecuador (Galápagos Is)

Family CYCLOPHORIDAE

Cyathopoma nishinoi 115 Japan

Japania hispida 115 Japan

Japonia shigetai 115 Japan

Japonia striatula 115 Japan

Nobuea kurodai 115 Japan

Family DIPLOMMATINIDAE

Diplommatina alata 115 Palau

Diplommatina aurea 115 Palau

Diplommatina circumstomata 115 Japan

Diplommatina crassilabris 115 Palau

Diplommatina gibboni 115 Palau

Diplommatina inflatula 115 Palau

Diplommatina lamellata 115 Palau

Diplommatina lateralis 115 Japan

Diplommatina lutea 115 Palau

Diplommatina pyramis 115
Palau

Diplommatina ringens 115
Palau

Hungerfordia pelewensis 115
Palau

Palaina albata 115 Palau

Palaina dimorpha 115 Palau

Palaina dohrni 115 Palau

Palaina doliolum 115
Federated States of Micronesia

Palaina kubaryi 115 Federated States of Micronesia

Palaina moussoni 115 Palau

Palaina ovatula 115
Federated States of Micronesia



Palaina patula 115 Palau

Palaina platycheilus 115 Palau

Palaina pupa 115 Palau

Palaina pusilla 115 Palau

Palaina rubella 115 Palau

Palaina scalarina 115
Federated States of Micronesia

Palaina strigata 115 Palau

Palaina striolata 115 Palau

Palaina taeniolata 115 Guam

Palaina wilsoni 115 Palau

Palaina xiphidium 115
Federated States of Micronesia

Pseudopalaina polymorpha 115
Palau

# Family HYDROBIIDAE

Avenionia brevis 26
Belgium, France, Germany,
Netherlands

Belgrandiella komenskyi 115 Czech Republic

Bythiospeum alpinum 115 Switzerland

Cochliopina compacta 154 Mexico

Fluminicola avernalis 115 Moapa Pebblesnail USA

Fluminicola columbiana 115 Columbia Pebblesnail USA

Fluminicola merriami 115 Pahranagat Pebblesnail USA

Fontigens holsingeri 115
Tapered Cavesnail
USA

Hauffenia minuta 26 France, Switzerland

Iglica gratulabunda 79 Austria

Neohoratia minuta 115 Switzerland

Paludinella conica 115 Guam, Northern Marianas Paludinella minima 115 Japan (Ogasawara-gunto)

Paludinella vitrea 115 Palau

Phrantela richardsoni 115 Australia

Pseudamnicola melitensis 115 Malta

Pyrgulopsis agarhecta 115 Ocmulgee Marstonia

Pyrgulopsis bacchus 115 Grand Wash Springsnail USA

Pyrgulopsis bernardina 115 San Bernadino Springsnail USA

Pyrgulopsis bruneauensis 115 Bruneau Hot Springsnail USA

Pyrgulopsis castor 115 Beaver Pond Marstonia USA

Pyrgulopsis chupaderae 115 Chupadera Springsnail USA

Pyrgulopsis conica 115 Kingman Springsnail USA

Pyrgulopsis crystalis 115 Crystal Spring Springsnail USA

Pyrgulopsis davisi 115
Davis County Springsnail
USA

Pyrgulopsis erythropoma 115 Ash Meadows Pebblesnail USA

Pyrgulopsis fairbanksensis 115 Fairbanks Springsnail USA

Pyrgulopsis gilae 115 Gila Springsnail USA

Pyrgulopsis glandulosa 115 Verde Rim Springsnail USA

Pyrgulopsis idahoensis 115 Idaho Springsnail USA

Pyrgulopsis isolata 115 Elongate-gland Springsnail USA

Pyrgulopsis metcalfi 115
Presidio County Springsnail
USA

Pyrgulopsis micrococcus 115 Oasis Valley Springsnail USA

Pyrgulopsis montezumensis 115 Montezuma Well Springsnail USA

Pyrgulopsis morrisoni 115 Page Sprlngsnail USA

Pyrgulopsis nanus 115 Distal-gland Springsnail USA

Pyrgulopsis olivacea 115 Olive Marstonia USA

Pyrgulopsis ozarkensis 115 Ozark Pyrg USA

Pyrgulopsis pachyta 115 Armored Marstonia USA

Pyrgulopsis pecosensis 115 Pecos Springsnail USA

Pyrgulopsis pisteri 115 Median-gland Nevada Springsnail USA

Pyrgulopsis robusta 115
Jackson Lake Springsnail
USA

Pyrgulopsis roswellensis 115 Roswell Springsnail USA

Pyrgulopsis simplex 115
Fossil Springsnail
USA

Pyrgulopsis sola 115 Brown Springsnail USA

Pyrgulopsis thermalis 115 New Mexico Hotspring Snail USA

Pyrgulopsis thompsoni 115 Huachuca Springsnail USA

Pyrgulopsis trivialis 115 Three Forks Springsnail USA

Somatogyrus amnicoloides 115 Oachita Pebblesnail USA

Somatogyrus aureus 115 Goldend Pebblesnail USA

Somatogyrus biangulatus 115 Angular Pebblesnail USA Somatogyrus constrictus 115 Knotty Pebblesnail USA

Somatogyrus coosaensis 115 Coosa Pebblesnail USA

Somatogyrus crassilabris 115 Thick-lipped Pebblesnail USA

Somatogyrus crassus 115 Stocky Pebblesnail USA

Somatogyrus currierianus 115 Tennessee Pebblesnail USA

Somatogyrus decipiens 115 Hidden Pebblesnail USA

Somatogyrus excavatus 115 Ovate Pebblesnail USA

Somatogyrus hendersoni 115 Fluted Pebblesnail USA

Somatogyrus hinkleyi 115 Granite Pebblesnail USA

Somatogyrus humerosus 115 Atlas Pebblesnail USA

Somatogyrus nanus 115 Dwarf Pebblesnail USA

Somatogyrus obtusus 115 Moom Pebblesnail USA

Somatogyrus parvulus 115 Sparrow Pebblesnail USA

Somatogyrus pilsbryanus 115 Tallapoosa Pebblesnail USA

Somatogyrus pygmaeus 115 Pygmy Pebblesnail USA

Somatogyrus quadratus 115 Quadrate Pebblesnail USA

Somatogyrus sargenti 115 Mud Pebblesnail USA

Somatogyrus strengi 115 Rolling Pebblesnail USA

Somatogyrus tenax 115 Savannah Pebblesnail USA Somatogyrus tennesseensis 115 Opaque Pebblesnail USA

Somatogyrus wheeleri 115 Channeled Pebblesnail USA

Tryonia adamantina 115 Diamond Y Springsnail

Tryonia alamosae 115 Alamosa Springsnail USA

Tryonia angulata<sup>24</sup> Sportingoods Tryonia USA

Tryonia brunei 24 Brune's Tryonia USA

Tryonia cheatumi 24 Phantom Tryonia USA

Tryonia clathrata 24 Grated Tryonia USA

Tryonia elata 24 Point of Rocks Tryonia USA

Tryonia ericae 24 Minute Tryonia USA

Tryonia gilae 24 Gila Tryonia USA

Tryonia imitator 24 Mimic Tryonia USA

Tryonia kosteri 24 Koster's Tryonia USA

Tryonia quitobaquitae 24 Quitabaquito Tryonia

Tryonia variegata <sup>24</sup> Amargossa Tryonia USA

Family LIAREIDAE

Cytora hirsutissima 115 New Zealand

Family MELANOPSIDAE

Fagotia esperi <sup>999</sup>
Austria, Belarus, Hungary, Moldova, Slovakia, Ukraine

Family PLEUROCERIDAE

Elimia cahawbensis 999 Cahaba Elimia USA

Elimia gerhardti 999 Coldwater Elimia USA

Elimia variata 999 Squat Elimia USA

Family POMATIASIDAE

Chondropoma callipeplum 133 Nicaragua

Tropidophora carinata 63 Mauritius, Réunion

Tropidophora michaudi 78
Mauritius

Family POTERIIDAE

Kondoraphe kiyokoae 115 Federated States of Micronesia

Ostodes brazieri 115
Federated States of Micronesia

Paramiella incisa 115
Federated States of Micronesia

Paramiella kondoi 115
Federated States of Micronesia

Family PUPINIDAE

Pupina brenchleyi 115 Federated States of Micronesia

Pupina complanata 115
Federated States of Micronesia,
Marshall Islands

Pupina difficilis 115 Palau

Family STROMBIDAE

Lambis violacea 166 Mauritius

Family TRUNCATELLIDAE

Taheitia alata 115 Guam

Taheitia lamellicosta 115 Guam

Taheitia mariannarum 115 Guam

Taheitia parvula 115 Guam

Truncatella guerinii 115 Japan (Ogasawara-gunto)



### Family VALVATIDAE

Valvata utahensis 115 Utah Valvata USA

### Family VIVIPARIDAE

Tulotoma magnifica 115 Tulotoma USA

### Order NEOGASTROPODA

#### Family BUCCINIDAE

Paradoxa confirmata 71 São Tomé & Príncipe Paradoxa thomensis 71 São Tomé & Príncipe

### Family CONIDAE

Conus kohni <sup>66</sup> Ecuador (Galápagos Is)

### Family MARGINELLIDAE

Cysticus gutta 71 São Tomé & Príncipe

Cysticus josephinae 71 São Tomé & Príncipe (Príncipe)

Gibberula cucullata 71 São Tomé & Príncipe

Gibberula modica 71 São Tomé & Príncipe

Gibberula puntillum 71 São Tomé & Príncipe

Granulina parilis 71 São Tomé & Príncipe

Marginella chalmersi 71 São Tomé & Príncipe (Príncipe)

Marginella gemma <sup>11</sup> São Tomé & Príncipe (Príncipe)

Marginella liparozona 71 São Tomé & Príncipe (Príncipe)

Marginella melvilli 71 São Tomé & Príncipe

Volvarina insulana 71 São Tomé & Príncipe

### Family MURICIDAE

Muricopsis mariangelae 71 São Tomé & Príncipe (São Tomé)

Muricopsis matildae 71 São Tomé & Príncipe (São Tomé)

Muricopsis Príncipensis 71 São Tomé & Príncipe (Príncipe)

Neorapana grandis 66
Ecuador (Galápagos Is)

### Family TURRIDAE

Agathothoma finalis 71 São Tomé & Príncipe

Crassispira sacerdotalis 71 São Tomé & Príncipe (São Tomé)

Scaevatula amancicoi 71 São Tomé & Príncipe (São Tomé)

Scaevatula pellisserpentis 71
São Tomé & Príncipe

### Order STYLOMMATOPHORA

### Family ACHATINELLIDAE

Auriculella ambusta 115 USA (Hawaiian Is)

Auriculella castanea 115 USA (Hawaiian Is)

Auriculella crassula 115 USA (Hawaijan Is)

Auriculella malleata 115 USA (Hawaiian Is)

Auriculella perpusilla 115 USA (Hawaiian Is)

Auriculella pulchra 115 USA (Hawaiian Is)

Auriculella tenella 115 USA (Hawaiian Is)

Elasmias jaurffreti 78 Mauritius (Rodrigues?)

Elasmias quadrasi 115
Guam, Northern Marianas
Lamellidea microstoma 115

Guam, Northern Marianas

Lamellidea subcylindrica 115

Guam, Northern Marianas

Partulina dolei 154 USA (Hawaiian Is)

Partulina dwightii 154 USA (Hawaiian Is)

Partulina fusoidea 154 USA (Hawaiian Is)

Partulina kaaeana 154 USA (Hawaijan Is)

Partulina nattii 154 USA (Hawaiian Is)

Partulina porcellana 154 USA (Hawaiian Is)

Partulina talpina 154 USA (Hawaiian Is)

Partulina terebra 154 USA (Hawaiian Is)

Partulina ustulata 154 USA (Hawaiian Is)

Partulina virgulata 81 USA (Hawaiian Is) Perdicella carinella 154 USA (Hawaiian Is)

Perdicella kuhnsi 154 USA (Hawaiian Is)

Perdicella ornata 154 USA (Hawaiian Is)

Tornatellinops ponapensis 115
Federated States of Micronesia

### Family ACHATINIDAE

Achatina vignoniana 183 Gabon

Archachatina knorri 183 Liberia

### Family ALYCAEIDAE

Awalycaeus akiratadai 115 Japan

Chamalychaeus expanstoma 115 Japan

Chamalychaeus miyazakii 115 Japan

Chamalychaeus takahashii 115 Japan

Chamalychaeus yanoshigehumii 115 Japan

Cipangochalax placeonovitas 115
Japan

Cipongocharax okamurai 115 Japan

# Family ARIONIDAE

Arion obesoductus 115 Austria

Arion simrothi 115 Germany

Arion vejdorskyi 115 Czech Republic

Binneya notabilis 115 Santa Barbara Shelled Slug USA

#### Family BRADYBAENIDAE

Aegista inexpectata 115
Japan

Aegista intonsa 115 Japan

Euhadra murayamai 115 Japan

Euhadra nachicola 115 Japan

Euhadra sadoensis 115 Japan

Paraegista apoiensis 115 Japan Family CAMAENIDAE

Amplirhagada herbertena 160 Australia

Cristigibba wesselensis 98
Australia

Eximiorhagada asperrima 161 Australia

Mandarina anijimana 115 Japan (Ogasawara-gunto)

Mandarina aureola 115 Japan (Ogasawara-gunto)

Mandarina chichijimana 115 Japan (Ogasawara-gunto)

Mandarina exoptata 115 Japan (Ogasawara-gunto)

Mandarina hahajimana 115 Japan (Ogasawara-gunto)

Mandarina hirasei 115 Japan (Ogasawara-gunto)

Mandarina luhuana 115 Japan (Ogasawara-gunto)

Mandarina mandarina 115 Japan (Ogasawara-gunto)

Mandarina polita 115 Japan (Ogasawara-gunto)

Mandarina ponderosa 115 Japan (Ogasawara-gunto)

Mandarina suenoae 115 Japan (Ogasawara-gunto)

Noctepuna muensis 115 Australia

Papustyla pulcherrima 115 Papua New Guinea

Family CHAROPIDAE

Bischoffena bischoffensis 115 Australia

Coenocharopa yessabahensis 115 Australia

Cralopa kaputarensis 115 Australia

Dipnelix pertricosa 115 Australia

Discocharopa mimosa 115 Australia

Himeroconcha fusca 115 Guam

Himeroconcha lamlanensis 115 Guam

Himeroconcha quadrasi 115 Guam

Himeroconcha rotula 115 Guam

Jokajdon callizonus 115
Federated States of Micronesia

Jokajdon tumidulus 115 Federated States of Micronesia

Kubaryiellus kubaryi 115
Federated States of Micronesia

Ladronellum mariannarum 115

Letomola barrenensis 140 Australia

Letomola contortus 115 Australia

Ngairea murphyi 115 Australia

Oreokera cumulus 115
Australia

Oreokera nimbus 115 Australia

Oreomava cannfluviatilus 140
Australia

Palikirus cosmetus 115
Federated States of Micronesia

Palikirus ponapicus 115
Federated States of Micronesia

Palline micramyla 115
Federated States of Micronesia

Palline notera 115

Planilaoma luckmanii 115 Australia

Radiodiscus coppingers 108 Argentina, Brazil, Chile

Radiodiscus iheringi 108 Argentina, Brazil, Uruguay

Rhophodon kempseyensis 115 Australia

Rhophodon problematica 161 Australia

Roimontis tolotomensis 115 Federated States of Micronesia

Russatus nigrescens 115
Federated States of Micronesia

Semperdon kororensis 115 Palau

Semperdon rotanus 115 Guam, Northern Marianas

Semperdon uncatus 115

Semperdon xyleborus 115 Palau

Sinployea kusaieana 115 Federated States of Micronesia

Trochogyra leptotera <sup>108</sup>
Argentina, Brazil, Chile, Paraguay,
Uruguay

Trukcharopa trukana 115
Federated States of Micronesia

Family CLAUSILIIDAE

Neophaedusa spelaeonis 115 Japan

Family COCHLICOPIDAE

Hypnophila remyi 26 France

Family COELIAXIDAE

Pyrgina umbilicata 71 São Tomé & Príncipe (São Tomé)

Thomea newtoni 71 São Tomé & Príncipe (São Tomé)

Family DISCIDAE

Anguispira picta 149
Painted Snake-coiled Forest Snail
USA

Discus engonata 6 Spain (Canary Is)

Discus macclintocki 115 Iowa Pleistocene Snail USA

Family ENDODONTIDAE

Aaadonta angaurana 115 Palau

Aaadonta constricta 115 Palau

Aaadonta fuscozonata 115 Palau

Aaadonta irregularis 115
Palau

Aaadonta kinlochi 115

Aaadonta pelewana 115

Palau

Hirasea biconcava 115
Japan (Ogasawara-gunto)

Hirasea eutheca 115 Japan (Ogasawara-gunto)

Japan (Ogasawara-gunto
Hirasea goniobasis 115

Japan (Ogasawara-gunto)

Hirasea hypolia 115 Japan (Ogasawara-gunto)

Hirasea major 115 Japan (Ogasawara-gunto)

Hirasea mirabilis 115 Japan

Hirasea nesiotica 115
Japan (Ogasawara-gunto)

Hirasea profundispira 115 Japan

Hirasea sinuosa 115
Japan (Ogasawara-gunto)



Hirasiella clara 115 Japan (Ogasawara-gunto)

Family ENIDAE

Luchuena hachijoensis 115 Japan

Family EUCONULIDAE

Dendrotrochus ponapensis 115 Federated States of Micronesia

Kusaiea frivola 115
Federated States of Micronesia

Lamprocystis denticulata 115 Guam, Northern Marianas

Lamprocystis fastigata 115 Guam, Northern Marianas

Lamprocystis hornbosteli 115 Northern Marianas

Lamprocystis misella 115 Guam

Liardetia tenuisculpta 115 Federated States of Micronesia

Palaua babelthuapi 115 Palau

Palaua margaritacea 115 Palau

Palaua minor 115

Palaua ngarduaisi 115 Palau

Palaua straminea 115 Palau

Palaua wilsoni 115 Palau

Ryssota pachystoma 115
Federated States of Micronesia

Tengchiena euroxestus 115
Australia

Family FERUSSACIIDAE

Cecilioides nyctelia 115 Portugal (Madeira)

Family GEOMITRIDAE

Actinella laciniasa 115 Portugal (Madeira)

Lemniscia galeata 115 Portugal (Madeira)

Family HELICARIONIDAE

Atrichotoxon usambarense 172 Tanzania

Elisolimax rufescens 172
Tanzania

Harmogenanina detecta 78 Réunion Leptichnus bernardi 172 Tanzania

Sitala mazumbaiensis 172 Tanzania

Thapsia grandis 172 Tanzania

Thapsia microsculpta 172 Tanzania

Thapsia usambarensis 172 Tanzania

Trichotoxon martensi 172 Tanzania

Trochozonites usambarensis 172
Tanzania

Family HELICIDAE

Chilostoma ziegleri 115 Austria

Codringtonia codringtonia 115
Greece

Tacheocampylaea raspaili 115 France

Tacheocampylaea tacheoides 115

Family

HELMINTHOGLYPTIDAE

Micrarionta gabbi 115 San Clemente Island Snail USA

Monadenia troglodytes 115 Shasta Sideband USA

Family HYGROMIIDAE

Halolimnohelix conradti 172 Tanzania

Petasina subtecta 115

Trichia biconica 115 Switzerland

Trichia caelata 115 Switzerland

Trichia gramnicola 115 Germany

Trichia oreinos 115

Family LIMACIDAE

Deroceras fatrense 115 Slovakia

Family MILACIDAE

Tandonia nigra 115 Switzerland Family OLEACINIDAE

Streptostyla turgidula 133 Costa Rica, Guatemala, Nicaragua

Streptostyla wani 133 Nicaragua

Family ORCULIDAE

Orcula austriaca 115 Austria

Orcula pseudodolium 115 Austria

Family ORTHALICIDAE

Bulimulus adelphus 154 Ecuador (Galápagos Is)

Orthalicus reses 115 Stock Island Tree Snail USA

Family PARTULIDAE

Samaana abbreviata 115 American Samoa

Family POLYGYRIDAE

Mesodon archeri 115 Archer's Toothed Land Snail USA

Mesodon jonesianus 115 Jones' Middle-toothed Land Snail USA

Mesodon magazinensis <sup>115</sup> Magazine Mountain Middle-toothed Snail USA

Polygyriscus virginianus 115 Virginia Fringed Mountain Snail USA

Stenotrema hubrichti 115 USA

Stenotrema pilsbryi 115
Pilsbry's Narrow-apertured Land
Snail
USA

Triodopsis occidentalis 115
Western Three-toothed Land Snail
USA

Triodopsis platysayoides 115
Flat-spired Three-toothed Snail
USA

Vespericola karokorum 115 Karok Hesperion USA Family PUNCTIDAE

Pasmaditta jungermanniae 138 Australia

Family PUPILLIDAE

Leiostyla fuscidula 70 Portugal (Azores)

Lyropupa anceyana 52 USA (Hawaiian Is)

Lyropupa clathratula 52 USA (Hawaiian Is)

Lyropupa hawaiiensis 52 USA (Hawaiian Is)

Lyropupa lyrata 52 USA (Hawaiian Is)

Lyropupa microthauma 52 USA (Hawaiian Is)

Lyropupa mirabilis 52 USA (Hawaiian Is)

Lyropupa prisca 52 USA (Hawaiian Is)

Lyropupa rhabdota 52 USA (Hawaiian Is)

Lyropupa scabra 52 USA (Hawaiian Is)

Lyropupa spaldingi 52 USA (Hawaiian Is)

Lyropupa sparna 52 USA (Hawaiian Is)

Lyropupa striatula 52 USA (Hawaiian Is)

Lyropupa thaanumi 52 USA (Hawaiian Is)

Lyropupa truncata 52 USA (Hawaiian Is)

Nesopupa alloia 52 USA (Hawaiian Is)

Nesopupa anceyana 52 USA (Hawaiian Is)

Nesopupa bacca 52 USA (Hawaiian Is)

Nesopupa baldwini 52 USA (Hawaiian Is)

Nesopupa bishopi 52 USA (Hawaiian Is)

Nesopupa dispersa 52 USA (Hawaiian Is)

Nesopupa dubitabilis 52 USA (Hawaiian Is)

Nesopupa eapensis 115 Palau

Nesopupa forbesi 52 USA (Hawaiian Is)

Nesopupa infrequens 52 USA (Hawaiian Is) Nesopupa kauaiensis 52 USA (Hawaiian Is)

Nesopupa limatula 52 USA (Hawaiian Is)

Nesopupa litoralis 52 USA (Hawaiian Is)

Nesopupa newcombi 52 USA (Hawaiian Is)

Nesopupa oahuensis 52 USA (Hawaiian Is)

Nesopupa plicifera 52 USA (Hawaiian Is)

Nesopupa quadrasi 115 Guam

Nesopupa rodriguezensis 78 Mauritius (Rodrigues?)

Nesopupa singularis 52 USA (Hawaiian Is)

Nesopupa subcentralis 52 USA (Hawaiian Is)

Nesopupa thaanumi 52 USA (Hawaiian Is)

Nesopupa waianensis 52 USA (Hawaiian Is)

Nesopupa wesleyana 52 USA (Hawaiian Is) •

Pronesopupa acanthinula 52 USA (Hawaiian Is)

Pronesopupa boettgeri 52 USA (Hawaiian Is)

Pronesopupa frondicella 52 USA (Hawaiian Is)

Pronesopupa hystricella 52 USA (Hawaiian Is)

Pronesopupa incerta 52 USA (Hawaiian Is)

Pronesopupa lymaniana 52 USA (Hawaiian Is)

Pronesopupa molokaiensis 52 USA (Hawaiian Is)

Pronesopupa orycta 52 USA (Hawaiian Is)

Pronesopupa sericata 52 USA (Hawaiian Is)

Pupoidopsis hawaiensis 52 USA (Hawaiian Is)

Family RHYTIDIDAE

Delos oualanensis 115 Federated States of Micronesia

Ougapia spaldingi 115 Australia

Paryphanta gilliesi 115 Gillies' Land Snail New Zealand Paryphanta hochstetteri 115
Hochstetter's Land Snail
New Zealand

Paryphanta lignaria 115
Woodformed Land Snail
New Zealand

Paryphanta rossiana 115 Ross' Land Snail New Zealand

Paryphanta traversi 115 Travers' Land Snail New Zealand

Family SAGDIDAE

Xenodiscula taintori 133 Guatemala, Nicaragua

Family STREPTAXIDAE

Edentulina usambarensis 172 Tanzania

Gonaxis usambarensis <sup>172</sup> Tanzania Gonaxis vosseleri <sup>172</sup>

Tanzania

Gulella alleni 172

Tanzania

Gulella amaniensis 172 Tanzania

Gulella bomolensis <sup>172</sup> Tanzania Gulella cuspidata <sup>172</sup>

Tanzania

Gulella foliifera 172 Tanzania

Gulella greenwayi 172 Tanzania

Gulella grossa <sup>172</sup> Tanzania

Gulella inconspicua 172 Tanzania

Gulella intrusa 172 Tanzania

Gulella ludwigi 172 Tanzania

Gulella ndamanyiluensis 172 Tanzania

Gulella paucidens 172 Tanzania

Gulella translucida 172 Tanzania

Gulella unidentata 172 Tanzania

Gulella usambarica 172 Tanzania

Ptychotrema usambarense 172 Tanzania



Tayloria amaniensis 172 Tanzania

Tayloria angustistriata 172
Tanzania

Tayloria hyalinoides 172 Tanzania

#### Family SUBULINIDAE

Hypolysia connollyana 172 Tanzania

Hypolysia usambarica 172 Tanzania

Pseudoglessula acutissima 172 Tanzania

Pseudoglessula conradti 172
Tanzania

Subulina usambarica 172 Tanzania

#### Family SUCCINEIDAE

Succinea chittenangoensis 115 Chittenango Ovate Amber Snail USA

Succinea guamensis 115
Guam

Succinea philippinica 115 Palau

#### Family THYROPHORELLIDAE

Thyrophorella thomensis 71 São Tomé & Príncipe (São Tomé)

#### Family VALLONIIDAE

Acanthinula spinifera 6 Spain (Canary Is)

Vallonia allamanica 115 Germany

Vallonia enniensis 115
Austria, Belgium, Czech Republic,
France, Germany, Greece, Hungary,

Italy, Poland, Romania, Russia, Slovakia, Spain (Balearic Is, Canary Is), Switzerland, Ukraine

Vallonia suevica 115 Germany

## Family VERTIGINIDAE

Nesopupa ponapica 115
Federated States of Micronesia

Truncatellina atomus <sup>6</sup> Spain (Canary Is) Vertigo paradoxa <sup>115</sup>

V*ertigo paradoxa* <sup>113</sup> Canada, USA

#### Family ZONITIDAE

Brazieria entomostoma 115 Federated States of Micronesia

Brazieria erasa 115 Federated States of Micronesia

**Brazieria lutaria** 115 Federated States of Micronesia

Brazieria minuscula 115 Federated States of Micronesia

Brazieria obesa 115 Federated States of Micronesia

Brazieria velata 115
Federated States of Micronesia

Glyphyalinia pecki 115 USA

Hongolua kondorum 115 Federated States of Micronesia

Kondoa kondorum 115 Federated States of Micronesia

Retinella stabilei 115 Italy

Trochomorpha approximata 115
Federated States of Micronesia

Trochomorpha carolinae 115 Federated States of Micronesia Trochomorpha conoides 115
Federated States of Micronesia

Trochomorpha contigua 115 Federated States of Micronesia

Trochomorpha kuesteri 115 Federated States of Micronesia

Trochomorpha nigritella 115 Federated States of Micronesia

Videna electra 115 Palau

Videna oleacina 115 Palau

Videna pagodula 115 Palau

Videna pumila 115 Palau

Vitrea inae 115 Spain

Vitrea striata 115 Spain (Balearic Is)

#### Class ENOPLA

#### Order HOPLONEMERTEA

## Family PROSORHOCHMIDAE

Argonemertes stocki 185 Australia

Geonemertes rodericana 185 Mauritius (Rodrigues)

Pantinonemertes agricola 185 Bermuda

#### Class ANTHOZOA

#### Order ACTINIARIA

#### Family EDWARDSIIDAE

Edwardsia ivelli 185 Ivell's Sea Anemone United Kingdom



# Subspecies and populations

#### Class MAMMALIA

#### Order MONOTREMATA

## Family TACHYGLOSSIDAE

Tachyglossus aculeatus

multiaculeatus

Short-beaked Echidna

LR 13 nt

Australia

#### Order DASYUROMORPHIA

#### Family DASYURIDAE

Antechinus minimus maritimus

Swamp Antechinus

LR 13 nt

Australia

Antechinus swainsonii insulanus (S)

Dusky Antechinus

(Victoria population)

LR 13 nt

Australia

Dasyurus maculatus gracilis

Spotted-tailed Quoll

EN 13 C2a

Australia

Dasyurus maculatus maculatus

Spotted-tailed Quoll

VU 13 C1+2a

Australia

Phascogale tapoatafa pirata

Brush-tailed Phascogale

LR 13 nt

Australia

Phascogale tapoatafa tapoatafa

Brush-tailed Phascogale

LR 13 nt

Australia

Sminthopsis archeri (S)

Chestnut Dunnart

 $DD^{-13}$ 

Australia

Sminthopsis griseoventer ssp.

Bollanger Id Dunnart

 $CR^{-13}$ 

B1+2e, C2b

Australia (Bollanger Id)

Sminthopsis murina tatei

Common Dunnart

LR 13 nt

Australia

#### Order PERAMELEMORPHIA

#### Family PERAMELIDAE

Isoodon auratus auratus

Golden Bandicoet

VU 13 B1+2e

Australia

Isoodon auratus barrowensis

Golden Bandicoot

VU 13 D2

Australia

Isoodon obesulus fusciventer

Ouenda

LR 13 nt

Australia

Isoodon obesulus nauticus

Southern Brown Bandicoot

VU 13 D2

Australia

Isoodon obesulus obesulus

Southern Brown Bandicoot

LR 13 nt

Australia

Isoodon obesulus peninsulae Southern Brown Bandicoot

LR 13 nt

Australia

Perameles bougainville bougainville

Western Barred Bandicoot

EN 13 B1+3a

Perameles bougainville fasciata

Western Barred Bandicoot

 $\mathbf{E}\mathbf{X}^{-13}$ 

Australia

Perameles gunnii gunnii

Eastern Barred Bandicoot

(Tasmanian population) VU 13 Alb

Australia

Perameles gunnii ssp. (S)

(mainland population)

CR 13 B1+2c, D1

Australia

## Order DIPROTODONTIA

#### Family VOMBATIDAE

Vombatus ursinus ursinus

Common Wombat

VII 13 D2

Australia

## Family PHALANGERIDAE

Phalanger intercastellanus (S)

Southern Common Cuscus

LR 13 nt

Australia

Trichosurus vulpecula hyopoleucus Common Brushtail Possum

LR 13 nt

Australia

#### Family POTOROIDAE

Bettongia gaimardi cuniculus

Tasmanian Bettong

LR 13 nt

Australia

Bettongia gaimardi gaimardi

Eastern Bettong

EX 13

Australia

Bettongia lesueur graii

Burrowing Bettong EX 13

Australia

Bettongia lesueur lesueur

Boodie

VU 13 D2

Australia

Bettongia leuser ssp.

VU 13 D2

Australia (Barrow & Boodie Is)

Bettongia penicillata ogilbyi

Wovlie

LR 13 cd

Australia

Bettongia penicillata penicillata

Brush-tailed Bettong

 $EX^{-13}$ 

Australia

Potorous tridactylus tridactylus

Long-nosed Potoroo

VU 13 C2a

Australia

#### Family MACROPODIDAE

Lagorchestes conspicillatus conspicillatus

Spectacled Hare-wallaby

VU 13 D2

Australia

Lagorchestes conspicillatus leichardti Spectacled Hare-wallaby LR <sup>13</sup> nt

Australia

Lagorchestes hirsutus bernieri Rufous Hare-wallaby VU <sup>13</sup> D2

Australia

Lagorchestes hirsutus dorreae Rufous Hare-wallaby

VU <sup>13</sup> D2 Australia

Lagorchestes hirsutus hirsutus Rufous Hare-wallaby

EX 13 Australia

Lagorchestes hirsutus ssp. Mala

CR <sup>13</sup> A1a, B1+3abcd, C2b, D1 Australia (central mainland)

Lagostrophus fasciatus albipilis Banded Hare-wallaby

EX 13 Australia

Lagostrophus fasciatus fasciatus Banded Hare-wallaby

VU <sup>13</sup> D2 Australia

Macropus eugenii (S) Tamar Wallaby (Western Australia population)

LR 13 nt Australia

Macropus eugenii (S) Tamar Wallaby (Southern Australia population)

LR 13 nt Australia

Macropus eugenii decres Tammar Wallaby

LR 13 nt Australia

Macropus eugenii derbianus Tammar Wallaby

LR 13 nt Australia

Macropus eugenii eugenii Tammar Wallaby

EW 13 Australia

Macropus fuliginosus fuliginosus Western Grey Kangaroo

LR 13 nt Australia Macropus giganteus tasmaniensis Eastern Grey Kangaroo

LR 13 nt Australia

Macropus robustus isabellinus

Barrow Island Euro VU <sup>13</sup> D2 Australia

Petrogale concinna concinna Nabarlek

LR 13 nt Australia

Petrogale concinna monastria Nabarlek

LR 13 nt Australia

Petrogale lateralis (S)
Black-footed Rock-wallaby
(MacDonnell Ranges population)
VU <sup>13</sup> Alab, B2ab+3abc
Australia

Petrogale lateralis (S)
Black-footed Rock-wallaby
(Western Kimberly population)
VU 13 B1+2c, C2a
Australia

Petrogale lateralis hacketti Black-footed Rock-wallaby

VU 13 D2 Australia

Petrogale lateralis lateralis Black-footed Rock-wallaby VU <sup>13</sup> B1+2abce, C2a Australia

Petrogale lateralis pearsoni Black-footed Rock-wallaby

VU 13 D2 Australia

Petrogale xanthopus celeris Yellow-footed Rock-wallaby

LR 13 nt Australia

Petrogale xanthopus xanthopus Yellow-footed Rock-wallaby

VU 13 C2a Australia

Family BURRAMYIDAE

Cercartetus caudatus macrurus Long-tailed Pygmy-possum LR <sup>13</sup> nt Australia

Family PETAURIDAE

Petaurus australis australis Yellow-bellied Glider

LR 13 nt Australia Order PRIMATES

Family CHEIROGALEIDAE

Phaner furcifer electromontis VU <sup>15</sup> B1+2c, C2b Madagascar

Phaner furcifer furcifer LR <sup>143</sup> nt Madagascar

Phaner furcifer pallescens VU <sup>143</sup> B1+2bc, C2a Madagascar

Phaner furcifer parienti VU <sup>15</sup> B1+2c, C2b Madagascar

Family LEMURIDAE

Eulemur fulvus albocollaris White-collared Lemur EN <sup>143</sup> B1+2bc Madagascar

Eulemur fulvus collaris Collared Lemur VU <sup>143</sup> A1cd, B1+2bc Madagascar

Eulemur fulvus sanfordi Sanford's Lemur VU <sup>143</sup> B1+2bc Madagascar

Eulemur macaco flavifrons Sclater's Lemur CR <sup>143</sup> Alcd, B1+2bc Madagascar

Eulemur macaco macaco Black Lemur VU <sup>143</sup> B1+2bc Madagascar

Hapalemur griseus alaotrensis Alaotran Gentle Lemur CR <sup>143</sup> A2cd, B1+2c Madagascar

Hapalemur griseus occidentalis Western Gentle Lemur VU <sup>143</sup> A1cd, B1+2abc Madagascar

Varecia variegata rubra CR <sup>143</sup> A2cd, B1+2bc Madagascar

Varecia variegata variegata EN <sup>143</sup> A1cd, B1+2bc Madagascar



## Family INDRIDAE

Propithecus diadema candidus CR <sup>143</sup> A2cd, B1+2bc Madagascar

Propithecus diadema diadema EN <sup>143</sup> Alcd Madagascar

Propithecus diadema edwardsi EN <sup>143</sup> A1c Madagascar

Propithecus diadema perrieri CR <sup>143</sup> A2cd, B1+2c Madagascar

Propithecus verreauxi coquereli EN <sup>143</sup> A2c, B1+2bc Madagascar

Propithecus verreauxi coronatus CR <sup>143</sup> B1+2bc, C2a Madagascar

Propithecus verreauxi deckeni VU <sup>143</sup> A1c Madagascar

Propithecus verreauxi verreauxi VU <sup>143</sup> A2cd Madagascar

## Family CALLITRICHIDAE

Saguinus bicolor bicolor Pied Tamarin EN <sup>143</sup> B1+2abcde, C2a Brazil

Saguinus fuscicollis crandalli DD <sup>143</sup> Peru?

Saguinus fuscicollis cruzlimai DD <sup>143</sup> Brazil?

Saguinus imperator imperator Black-chinned Emperor Tamarin VU <sup>143</sup> A1c, B1+2c Brazil, Peru

Saguinus nigricollis hernandezi VU <sup>143</sup> A1c, B1+2c Colombia

## Family CEBIDAE

Alouatta belzebul ululata
Red-handed Howling Monkey
CR <sup>143</sup> B1+2abcde, C2a
Brazil

Alouatta coibensis coibensis EN <sup>143</sup> B1+2abcde, C2a Panama

Alouatta coibensis trabeata CR <sup>143</sup> B1+2abcde, C2a Panama Alouatta fusca clamitans VU 143 Alc Argentina, Brazil

Alouatta fusca fusca Northern Brown Howling Monkey CR <sup>143</sup> B1+2abcde, C2a, D1 Brazil

Alouatta palliata mexicana VU <sup>143</sup> A1c, B1+2c Guaternala, Mexico

Alouatta seniculus amazonica DD <sup>143</sup> Brazil

Alouatta seniculus insulans VU <sup>143</sup> A1c, B1+2c Trinidad and Tobago

Alouatta seniculus juara DD <sup>143</sup> Brazil

Alouatta seniculus puruensis DD 143 Bolivia, Brazil

Aotus lemurinus griseimembra Night Monkey EN 143 B1+2abcde

Aotus lemurinus lemurinus VU <sup>143</sup> B1+2c, C2a Colombia, Costa Rica, Panama

Colombia

Ateles belzebuth belzebuth
VU <sup>143</sup> A1c
Brazil, Colombia, Ecuador, Peru,
Venezuela

Ateles belzebuth brunneus EN <sup>143</sup> B1+2abcde Colombia

Ateles belzebuth hybridus Hybrid Spider Monkey EN <sup>143</sup> B1+2abcde Colombia. Venezuela

Ateles fusciceps fusciceps CR <sup>143</sup> B1+2abcde, C2a Ecuador

Ateles fusciceps robustus VU 143 A1c, B1+2c Colombia, Panama

Ateles geoffroyi ozuerensis CR <sup>143</sup> B1+2abcde, C2a Panama

Ateles geoffroyi frontatus VU <sup>143</sup> A1c, B1+2c Costa Rica, Nicaragua

Ateles geoffroyi grisescens EN <sup>143</sup> B1+2abcde, C2a Colombia, Panama Ateles geoffroyi ornatus VU 143 Alc, BI+2c Costa Rica

Ateles geoffroyi pan
DD 143
Guatemala

Ateles geoffroyi panamensis EN <sup>143</sup> B1+2abcde, C2a Costa Rica, Panama

Ateles geoffroyi yucatanensis VU <sup>143</sup> A1c, B1+2c Belize, Guatemala, Mexico

Cacajao calvus calvus EN <sup>143</sup> B1+2abcde Brazil

Cacajao calvus novaesi EN <sup>143</sup> B1+2abcde Brazil

Cacajao calvus rubicundus EN <sup>143</sup> B1+2abcde Brazil, Colombia

Cacajao calvus ucayalii VU 143 Alc Brazil?, Peru

Callicebus cupreus ornatus
Ornate Titi
VU 143 A1c, B1+2c
Colombia

Callicebus personatus barbarabrownae Northern Bahian Blond Titi CR <sup>143</sup> B1+2abcde Brazil

Callicebus personatus melanochir Southern Bahian Masked Titi VU <sup>143</sup> Alc Brazil

Callicebus personatus nigrifrons
Black-fronted Titi
VU 143 A1c
Brazil

Callicebus personatus personatus Northern Masked Titi VU <sup>143</sup> A1c, B1+2c Brazil

Callicebus torquatus medemi VU <sup>143</sup> B1+2c, C2a Colombia

Cebus albifrons adustus DD <sup>143</sup> Venezuela

Cebus albifrons aequatorialis DD <sup>143</sup> Ecuador

Cebus albifrons cesarae
DD 143
Colombia

Cebus albifrons cuscinus White-fronted Capuchin DD 143

Bolivia?, Brazil, Peru

Cebus albifrons hypoleucus DD <sup>143</sup>

Colombia

Cebus albifrons leucocephalus DD 143

Venezuela

Cebus albifrons malitiosus
DD 143

Colombia

Cebus albifrons trinitatis CR <sup>143</sup> B1+2abcde, C2a Trinidad and Tobago

Cebus albifrons yuracus
Andean White-fronted Capuchin
DD 143

Colombia, Ecuador, Peru

Cebus apella margaritae CR <sup>143</sup> B1+2abcde, C2a Venezuela

Cebus apella robustus Robust Tufted Capuchin VU <sup>143</sup> B1+2c Brazil

Cebus capucinus curtus VU 143 B1+2c Colombia

Chiropotes satanas satanas Black Saki

EN <sup>143</sup> B1+2abcde Brazil

Chiropotes satanas utahicki Uta Hick's Bearded Saki

VU 143 Alc Brazil

Lagothrix lagotricha cana VU 143 A1c Brazil, Peru

Lagothrix lagotricha lugens Colombian Woolly Monkey CR <sup>143</sup> B1+2abcde, C2a Colombia, Venezuela

Lagothrix lagotricha poeppigii VU <sup>143</sup> A1c Brazil, Ecuador, Peru

Pithecia monachus milleri VU <sup>143</sup> A1c, B1+2c Colombia

Saimiri oerstedi citrinellus CR <sup>143</sup> B1+2abcde, C2a Costa Rica

Saimiri oerstedi oerstedi EN <sup>143</sup> B1+2abcde, C2a Costa Rica, Panama Family CERCOPITHECIDAE

Cercocebus atys lunulatus White-collared Mangabey EN <sup>143</sup> A2c

EN <sup>143</sup> A2c Côte d'Ivoire, Ghana

Cercocebus galeritus "sanjei" Sanje Mangabey

EN <sup>143</sup> B1+2c Tanzania

Cercocebus galeritus chrysogaster Golden-bellied Mangabey

DD 143 Congo

Cercocebus galeritus galeritus

Tana River Mangabey
EN 143 B1+2abcde, C2a

Kenya
Cercopithecus aethiops

djamdjamensis Djam-djam DD <sup>143</sup> Ethiopia

Cercopithecus albogularis albotorquatus

Tana River Sykes Monkey
DD 143

Kenya, Somalia

Cercopithecus albogularis zammaranoi Somalia Sykes Monkey

DD 143 Somalia

Cercopithecus diana diana

Diana Monkey VU 143 Ala

Guinea, Liberia, Sierra Leone

Cercopithecus diana roloway Roloway Monkey

EN <sup>143</sup> A1c Côte d'Ivoire, Ghana

Cercopithecus erythrotis erythrotis Fernando Po Red-eared Monkey

EN <sup>143</sup> B1+2abce Equatorial Guinea (Bioko)

Cercopithecus hamlyni kahuziensis Kahuzi Owl-faced Monkey

VU 143 A2c Rwanda?, Zaire

Cercopithecus mitis elgonis Elgon Blue Monkey

DD 143

Kenya, Uganda

Cercopithecus mitis kandti Golden Monkey

EN <sup>143</sup> B1+2c Rwanda, Uganda, Zaire Cercopithecus pogonias pogonias Fernando Po Crowned Monkey

VU <sup>143</sup> A2c Cameroon, Equatorial Guinea

Cercopithecus preussi insularis Fernando Po Preuss's Monkey

EN <sup>143</sup> B1+2abce, C1 Equatorial Guinea (Bioko)

Cercopithecus preussi preussi Mainland Preuss's Monkey EN <sup>143</sup> Alcd+2c

Cameroon, Nigeria

Colobus angolensis palliatus
Tanzanian Black-and-white Colobus
DD 143

Tanzania

Colobus angolensis prigoginei
Prigogine's Black-and-white Colobus
DD 143
Zaire

Colobus angolensis ruwenzorii Rwenzori Black-and-white Colobus VU 143 B1+2c

Rwanda, Uganda, Zaire

Colobus guereza gallarum Neumann's Black-and-white Colobus DD 143

Ethiopia

Lophocebus aterrimus opdenboschi Opdenbosch's Black Mangabey

DD 143 Angola, Zaire

Mandrillus leucophaeus

leucophaeus Mainland Drill

VU <sup>143</sup> Alacd+2b Cameroon, Gabon?, Nigeria

Mandrillus leucophaeus mundamensis Mainland Drill

EN 143 Alacd+2cd, C1+2a Cameroon, Gabon? Nigeria

Cameroon, Gabon?, Nigeria

Mandrillus leucophaeus poensis

Fernando Po Drill

EN <sup>143</sup> B1+2abcde, C1 Equatorial Guinea (Bioko)

Procolobus badius bouvieri
Bouvier's Red Colobus
EN 43 B1+2c

Congo
Procolobus badius epieni

Niger Delta Red Colobus
EN 143 B1+2ac

Nigeria

Procolobus badius foai Foa Red Colobus DD 143

Zaire



Procolobus badius gordonorum

Uhehe Red Colobus EN 143 B1+2abc

Tanzania

Procolobus badius kirkii

Zanzibar Red Colobus

EN 143 B1+2c, C2a

Tanzania

Procolobus badius langi

Maiko Red Colobus

 $DD^{-143}$ 

Zaire

Procolobus badius lulindicus

Kahuzi Red Colobus

 $DD^{-143}$ 

Zaire

Procolobus badius parmentierorum

Lomami Red Colobus

 $DD^{-143}$ 

Zaire

Procolobus badius pennantii

Pennant's Red Colobus

EN 143 B1+2abcde, C1

Equatorial Guinea

Procolobus badius preussi

Preuss's Red Colobus

EN 143 B1+2ac

Cameroon, Nigeria (ex?)

Procolobus badius rufomitratus

Tana River Red Colobus

EN 143 B1+2abcde, C2a

Procolobus badius semlikiensis

Semliki Red Colobus

DD 143

Uganda?, Zaire

Procolobus badius temminckii

Temminck's Red Colobus

EN 143 Alc

Gambia, Guinea, Guinea-Bissau,

Senegal

Procolobus badius waldroni

Miss Waldron's Bay Colobus

CR 143 Alc

Côte d'Ivoire, Ghana

Family HOMINIDAE

Gorilla gorilla (S)

Nigerian Gorilla

CR 143 Alc, C2a

Cameroon, Nigeria

Gorilla gorilla beringei

Mountain Gorilla

CR 143 C2b

Rwanda, Uganda, Zaire

Gorilla gorilla gorilla

Western Lowland Gorilla

EN 143 A2cd

Angola, Cameroon, Central African

Republic, Congo, Equatorial Guinea,

Gabon, Nigeria

Gorilla gorilla graueri

Grauer's Gorilla

EN 143 A1cd+2cd

Uganda?, Zaire

Pan troglodytes schweinfurthi

Eastern Chimpanzee

EN 143 A1cd+2cd

Burundi, Rwanda, Sudan, Tanzania,

Uganda, Zaire

Pan troglodytes troglodytes

Central Chimpanzee

EN 143 A2cd

Angola, Cameroon, Central African

Republic, Congo, Equatorial Guinea,

Gabon, Nigeria

Pan troglodytes verus

Western Chimpanzee

EN 143 A1cd+2cd

Côte d'Ivoire, Ghana, Guinea,

Guinea-Bissau, Liberia, Mali,

Nigeria?, Senegal, Sierra Leone

#### Order CARNIVORA

Family CANIDAE

Canis lupus (S)

Grey Wolf

EW 184

Mexico

Canis lupus (S)

Grey Wolf

LR 184 cd

Portugal, Spain

Canis lupus (S) Grey Wolf

VU 184 D2

Italy

Family FELIDAE

Acinonyx jubatus hecki Northwest African Cheetah

EN 40 C2a, D1

Algeria, Egypt (ex?), Libya (ex?), Morocco, Niger, Western Sahara

Acinonyx jubatus venaticus

Asiatic Cheetah

CR 40 C2b, D1

Iran.

Felis margarita scheffeli

Pakistan Sand Cat

Pakistan

LR 40 nt

Felis silvestris grampia

Scottish Wildcat

VU 40 A1de+2e

United Kingdom

Herpailurus yaguarondi cacomitli Texas Jaguarundi

EN 40 D1

Mexico, USA

Leopardus pardalis albescens

Texas Ocelot

EN 40 D1

Mexico, USA

Leptailurus serval constantinus

North African Serval

EN 40 D1

Algeria (ex?), Morocco (ex?),

Tunisia (ex?)

Otocolobus manul ferrugineous

Red Manul

LR 40 nt

Afghanistan, Armenia, Azerbaijan,

Iran, Kazakhstan, Pakistan,

Turkmenistan, Uzbekistan

Panthera leo persica

Asiatic Lion EN 40 D1

India

Panthera pardus japonensis

North Chinese Leopard

EN 40 C2a

China

Panthera pardus kotiya

Sri Lankan Leopard

EN 40 C2a

Sri Lanka

Panthera pardus melas Javan Leopard

EN 40 C2a Indonesia

Panthera pardus nimr

South Arabian Leopard

CR 40 C2a Saudi Arabia, United Arab Emirates,

Yemen

Panthera pardus orientalis

Amur Leopard

CR 40 A1c, D1

China, North Korea, Russia, South

Korea

Panthera pardus panthera

North African Leopard

CR 40 C2a

Algeria (ex?), Morocco (ex?), Tunisia (ex?)

Panthera pardus saxicolor

North Persian Leopard EN 40 C2a

Afghanistan, Iran, Turkmenistan

Panthera pardus tulliana

Anatolian Leopard

CR 40 C2a

Turkey

Panthera tigris altaica

Amur Tiger

CR 40 C2b

China (ex?), North Korea (ex?),

Panthera tigris amoyensis

South China Tiger

CR 40 DI

China

Panthera tigris sumatrae

Sumatran Tiger

CR 40 C1+2a

Indonesia

Prionailurus bengalensis

iriomotensis

Iriomote Cat

EN 40 D1

Japan (Nansei-shoto)

Puma concolor coryi

Florida Panther

CR 40 D1

USA

Puma concolor cougar

Eastern Puma

CR 40 D1

Canada, USA

#### Family HERPESTIDAE

Bdeogale crassicauda omnivora Sokoke Bushy-tailed Mongoose

EN 117 B1+2c

Kenya, Tanzania

#### Family HYAENIDAE

Proteles cristatus (S)

Aardwolf

DD 92

Burundi?, Central African Republic?, Egypt, Eritrea, Ethiopia, Kenya,

Somalia, Sudan, Tanzania, Uganda

#### Family MUSTELIDAE

Conepatus mesoleucus telmalestes Big Thicket Hog-nosed Skunk

EX 117

USA

Eira barbara senex

Greyheaded Tayra

VU 117 C1

Belize, Guatemala, Mexico

Martes flavigula robinsoni

Javan Yellow-throated Marten

EN 117 BI+2c

Indonesia

Martes melampus tsuensis

Tsushima Island Marten

VU 117 C2b

Japan

Martes zibellina brachyura

Japanese Sable

DD 117

Japan

Melogale personata orientalis

Javan Ferret-badger

LR 117 nt

Indonesia

Mustela eversmanni amurensis

VU 117 A2cd

China, Russia

Vormela peregusna peregusna

European Marbled Polecat

VU 117 A1cd

Bulgaria, Greece, Romania, Turkey,

Ukraine, Yugoslavia

#### Family ODOBENIDAE

Odobenus rosmarus laptevi

Laptev Walrus

 $\overline{DD}$  153

Russia

#### Family OTARIIDAE

Zalophus californianus japonicus

Japanese Sealion

EX 153

Japan, North Korea, South Korea

Zalophus californianus wollebaeki

Galápagos Sea Lion

VU 153 A2d

Ecuador (Galápagos Is)

#### Family PHOCIDAE

Halichoerus grypus (S)

Grey Seal

EN 153 DI

Denmark, Estonia, Finland,

Germany, Latvia, Lithuania, Poland,

Russia, Sweden

[Atlantic (northeast)]

Phoca hispida botnica

Baltic Seal

VU 153 D2

Estonia?, Finland, Russia, Sweden

Phoca hispida ladogensis

Ladoga Seal

VU 153 D2

Russia

[L. Ladoga]

Phoca hispida saimensis

Saimaa Seal

EN 153 B1+2ce

Finland

Phoca vitulina mellonae

Ungava Seal

 $DD^{-153}$ 

Canada, Greenland

#### Family URSIDAE

Ursus arctos nelsoni

Mexican Grizzly Bear EX 17

Mexico, USA

Ursus thibetanus gedrosianus

Baluchistan Bear

CR 17 B1+2abc, C2a

Iran, Pakistan

#### Family VIVERRIDAE

Arctictis binturong whitei

Palawan Binturong

VU 117 BI+2c

Philippines

Arctogalidia trivirgata trilineata

Javan Small-toothed Palm Civet

EN 117 C2a

Indonesia

Crossarchus ansorgei ansorgei

Angolan Cusimanse

 $\widetilde{\mathbf{DD}}^{-117}$ 

Angola Genetta genetta isabelae

Ibiza Genet

VU 117 B1+2c

Spain (Balearic Is) Paradoxurus hermaphroditus

lignicolor Mentawai Palm Civet

VU 117 A2c Indonesia

Poiana richardsoni liberiensis

Leighton's Linsang

 $\overrightarrow{DD}$  117

Côte d'Ivoire, Liberia, Sierra Leone

## Order CETACEA

#### Family BALAENIDAE

Balaena mysticetus (S)

Bowhead Whale

(Bering Sea, Chukchi Sea, Beaufort

Sea population)

LR 41 cd [Arctic Sea, Pacific (northeast,

northwest)]

Balaena mysticetus (S)

Bowhead Whale

(Hudson Bay, Foxe Basin stock)

VU 41 DI

[Atlantic (northwest)]

Balaena mysticetus (S)

Bowhead Whale



(Okhotsk Sea population)

EN 41 D1

[Pacific (northwest)]

Balaena mysticetus (S)

Bowhead Whale

(Baffin Bay, Davis Strait stock)

VU 41 D1

[Atlantic (northwest)]

Balaena mysticetus (S)

Bowhead Whale

(Spitzbergen stock)

EN 41 D1

[Atlantic (northeast)]

Eubalaena glacialis (S)

Northern Right Whale

(North Pacific stock)

EN 41 D1

[Pacific (eastern central, northeast,

northwest)]

Eubalaena glacialis (S)

Northern Right Whale

(North Atlantic stock)

EN 41 D1

[Atlantic northwest, western central]

#### Family BALAENOPTERIDAE

Balaenoptera musculus (S)

Blue Whale

(Antarctic stock)

EN 41 D1

[Atlantic (Antarctic), Indian Ocean (Antarctic), Pacific (Antarctic)]

Balaenoptera musculus (S)

Blue Whale

(North Pacific stock)

LR 41 cd

[Pacific (eastern central, northeast, northwest, western central)]

Balaenoptera musculus (S)

Blue Whale

(North Atlantic stock)

VU 41 D1

[Atlantic (eastern central, northeast, northwest, western central)]

Balaenoptera musculus brevicauda

Pygmy Blue Whale

DD 41

[Atlantic (Antarctic, southeast, southwest), Indian Ocean (Antarctic, eastern, western), Pacific (Antarctic, southeast, southwest)]

#### Family ESCHRICHTIIDAE

Eschrichtius robustus (S)

Gray Whale

(Northeast Pacific stock)

LR 41 cd

[Pacific (eastern central, northeast)]

Eschrichtius robustus (S)

Gray Whale

(Northwest Pacific stock)

EN 41 D1

[Pacific (northwest)]

#### Family PHOCOENIDAE

Neophocaena phocaenoides (S)

Finless Porpoise

(R. Yangtze population)

EN 41 C2b

China

[Pacific (northwest)]

Phocoena phocoena (S)

Harbour Porpoise

(Black Sea stock)

VU 41 Alc, C1+2b

Bulgaria, Georgia, Moldova, Romania, Russia, Turkey, Ukraine

[Mediterranean and Black Sea]

Phocoena phocoena (S)

Harbour Porpoise

(Baltic Sea stock)

VU 41 A1c, C1+2b

Denmark, Estonia, Finland,

Germany, Latvia, Lithuania, Poland,

Russia, Sweden

[Atlantic (northeast)]

#### Order SIRENIA

## Family TRICHECHIDAE

Trichechus manatus latirostris

Florida Manatee

VU 157 A2d

USA

[Atlantic (western central)]

Trichechus manatus manatus

Antillean Manatee

VU 157 A1cd, C2a

Belize, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico,

Suriname, Venezuela

[Atlantic (southwest, western

central)]

#### Order PERISSODACTYLA

Family EQUIDAE

Equus ferus przewalskii

Przewalski's Horse

EW 64

China, Kazakhstan?, Mongolia

Equus hemionus hemionus North Mongolian Kulan

DD 64

Mongolia

Equus hemionus hemippus

Syrian Wild Ass

EX 64

Iran, Iraq, Israel, Saudi Arabia, Syria

Equus hemionus khur

Indian Wild Ass

EN 64 A2c

India.

Equus hemionus kulan

Kulan

LR 64 nt

Kazakhstan, Turkmenistan

Equus hemionus luteus

Gobi Kulan

DD 64

China, Mongolia

Equus hemionus onager

Onager EN 64

C1

Iran

Equus kiang kiang

Western Kiang

DD 64

India, Nepal

Equus kiang polyodon

Southern Kiang

DD 64

China, India

Equus zebra zebra

Cape Mountain Zebra

EN <sup>64</sup> C2a

South Africa

#### Family RHINOCEROTIDAE

Ceratotherium simum cottoni

Northern White Rhinoceros CR 3 Alabc, D1

Sudan (ex?), Zaire

Dicerorhinus sumatrensis harrissoni

CR 11 Albed, C2a, D1

Indonesia, Malaysia

Dicerorhinus sumatrensis lasiotis

Bangladesh, India, Myanmar

Dicerorhinus sumatrensis

sumatrensis

CR 11 Albcd, C2a Indonesia, Malaysia, Thailand

Rhinoceros sondaicus annamiticus

CR 11 A1cd, C2b, D1

Cambodia (ex?), Laos (ex?),

Thailand (ex), Viet Nam

Rhinoceros sondaicus sondaicus

CR 11 C2b, D1

Indonesia, Malaysia, Myanmar (ex),

Thailand (ex)

Rhinoceros unicornis (S) Great Indian Rhinoceros

EN 11 B1+2cde, C1

Bhutan, India (Uttar Pradesh), Nepal

Rhinoceros unicornis (S)

Great Indian Rhinoceros

EN II B1+2cde, C1

India (Assam, West Bengal)

#### Order HYRACOIDEA

#### Family PROCAVIIDAE

Dendrohyrax arboreus (S) VU 93 B1+2c

South Africa

#### Order ARTIODACTYLA

#### Family SUIDAE

Hylochoerus meinertzhageni

ivariensis Western Forest Hog

VU 135 A2cd, B1+2abde Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone

## Phacochoerus aethiopicus

aethiopicus

Cape Warthog

EX 135

South Africa

## Phacochoerus aethiopicus delameri

Somali Warthog

VU 135 A2cd, B1+2acd

Kenya, Somalia

#### Phacochoerus africanus aeliani Eritrean Warthog

EN <sup>135</sup> Alacd, B1+2abd Djibouti, Eritrea

## Sus barbatus ahoenobarbus

Palawan Bearded Pig

LR 135 nt Philippines

Sus barbatus oi

Western Bearded Pig

LR 135 nt

Indonesia, Malaysia

#### Sus scrofa riukiuanus

Ryukyu Islands Wild Pig VU 135 Alacde, B1+2bd

Japan (Nansei-shoto)

#### Family HIPPOPOTAMIDAE

## Hexaprotodon liberiensis heslopi

CR 89 D1

Nigeria

Hippopotamus amphibius tschadensis

VU 89 Ala Chad, Niger

#### Family CAMELIDAE

Lama guanicoe cacsilensis

VU 164 C2a

Bolivia, Chile, Peru

#### Lama guanicoe huanacus

EN 164 B1+2ce

Chile

#### Lama guanicoe voglii

VU 164 Albed, C2a

Argentina

#### Vicugna vicugna mensalis

LR 164 cd

Bolivia, Chile, Peru

## Vicugna vicugna vicugna

LR 164 cd

Argentina, Bolivia, Chile

## Family TRAGULIDAE

## Tragulus napu nigricans

Balabac Chevrotain

EN 59 B1+2ce

Philippines

#### Family MOSCHIDAE

## Moschus chrysogaster chrysogaster

Alpine Musk Deer

LR 59 nt

China, India

#### Moschus chrysogaster leucogaster Himalayan Musk Deer

LR 59 nt

Afghanistan, China, India, Nepal,

Pakistan

## Family CERVIDAE

#### Alces alces cameloides

Siberian Elk

LR 59 nt

China, Mongolia

#### Axis porcinus annamiticus

Indo-Chinese Hog Deer

DD 59

Cambodia, China, Laos, Thailand

(ex), Viet Nam

## Axis porcinus porcinus

LR 59 nt

Bhutan, Cambodia, China, India, Laos, Myanmar, Nepal, Pakistan, Sri

Lanka [int]

## Cervus duvauceli branderi

Upland Barasingha

EN 59 D1

India

## Cervus duvauceli duvauceli

VU 59 C1

India, Nepal

## Cervus duvauceli ranjitsinhi

CR 59 C2b

India

#### Cervus elaphus affinis

Shou

DD 59

Bhutan?, China

#### Cervus elaphus alashanicus

Alashan Wapiti

DD 59

China

## Cervus elaphus bactrianus

Bactrian Deer

VII 59 D1

Afghanistan, Turkmenistan,

Uzbekistan

[R. Amu Darya valley]

#### Cervus elaphus barbarus Atlas Deer

T D 59 -

LR 59 nt

Algeria, Morocco (ex), Tunisia

## Cervus elaphus corsicanus

Corsican Red Deer

EN 59 D1

France, Italy

Cervus elaphus hanglu Hangul

EN <sup>59</sup> D1 India

## Cervus elaphus macneilli

McNeill's Deer

DD 59

China

## Cervus elaphus wallichi

Tibetan Red Deer

DD 59

Bhutan?, China

## Cervus elaphus yarkandensis

Yarkand Deer

EN 59 Ala

China

#### Cervus eldi eldi

Manipur Brow-antlered Deer

CR 59 B1+2c, C2b

India

[L. Loktak swamps]

#### Cervus eldi siamensis

Thailand Brow-antlered Deer

DD 59

Cambodia, China, Laos, Thailand, Viet Nam

## Cervus eldi thamin

Burmese Brow-antlered Deer

LR 59 nt Myanmar, Thailand



Cervus nippon aplodontus Elaphodus cephalophus michianus North Honshu Sika Michie's Tufted Deer DD 59 DD 59 Japan China VU 9 D1 Cervus nippon grassianus Hydropotes inermis argyropus Shansi Sika CR 59 C2a North Korea, South Korea China Hydropotes inermis inermsis EX 9 LR 59 nt Cervus nippon keramae China Ryukyu Sika CR 59 C2a Muntiacus feai feai Japan (Nansei-shoto) DD 59 LR 9 cd China, Myanmar, Thailand Cervus nippon kopschi South China Sika Muntiacus feai rooseveltorum EN 59 D1 Zimbabwe DD 59 China China, Laos, Viet Nam Cervus nippon mandarinus Odocoileus hemionus cerrosensis LR 9 cd North China Sika Cedros Island Mule Deer CR 59 D1 EN 59 D1 China Mexico Cervus nippon mantchuricus Odocoileus virginianus clavium LR 9 cd Mantchurian Sika Key Deer DD 59 EN 59 D1 Russia Zaire Cervus nippon pseudaxis Odocoileus virginianus leucurus Tonkin Sika Columbian White-tailed Deer CR 59 DI LR 59 nt LR 9 cdViet Nam USA Cervus nippon pulchellus Ozotoceros bezoarticus bezoarticus Tsushima Sika LR 59 nt DD 59 Brazil, Uruguay Japan Ozotoceros bezoarticus celer EN 59 B1+2cde, C2a Cervus nippon sichuanicus Shansi Sika Argentina EN 59 DI Ozotoceros bezoarticus leucogaster China LR 59 nt Argentina, Bolivia, Brazil, Paraguay Cervus nippon taiouanus Taiwan Sika Rangifer tarandus pearyi CR 59 D1 EN 9 C1 Peary Caribou Taiwan EN 59 Alb, C1 Cervus nippon yesoensis Canada Hokkaido Sika Golden Takin DD 59 Japan Family ANTILOCAPRIDAE Dama dama mesopotamica Antilocapra americana mexicana Persian Fallow Deer Mexican Pronghorn EN 59 D1 LR 9 cd Mexico, USA lran, lraq (ex?) Antilocapra americana peninsularis Elaphodus cephalophus cephalophus Baja California Pronghorn DD 59 CR 9 C2b China China, Myanmar Mexico

Family BOVIDAE Aepyceros melampus petersi Black-faced Impala Angola, Namibia Alcelaphus buselaphus buselaphus **Bubal Hartebeest** Algeria, Egypt, Morocco, Tunisia Alcelaphus buselaphus caama Red Hartebeest Angola, Botswana, Lesotho (ex?), Namibia, South Africa, Swaziland, Alcelaphus buselaphus cokei Coke's Hartebeest Kenya, Tanzania Alcelaphus buselaphus lelwel Lelwel Hartebeest Central African Republic, Chad, Ethiopia, Kenya, Sudan, Uganda, Alcelaphus buselaphus major Western Hartebeest Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Gambia (ex?), Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Togo Alcelaphus buselaphus swaynei Swayne's Hartebeest EN 9 Ala, Cl Ethiopia, Somalia (ex) Alcelaphus buselaphus tora Tora Hartebeest Eritrea, Ethiopia, Sudan Budorcas taxicolor bedfordi EN 37 A2cd, C2a, D1 Budorcas taxicolor taxicolor Mishmi Takin EN 37 A2cd China, India, Myanmar Budorcas taxicolor tibetana Sichuan Takin VU 37 A2cd

Budorcas taxicolor whitei

Bhutan Takin

VU 37 A2cde

Bhutan, China, India

Antilocopra americana sonoriensis

Sonoran Pronghorn

EN 9 C2b

Mexico, USA

Elaphodus cephalophus ichangensis

Ichang Tufted Deer

DD 59

China

Capra aegagrus aegagrus

VU 37 A2cde

Afghanistan, Armenia, Azerbaijan, Georgia, Iran, Lebanon (ex), Russia,

Capra aegagrus blythi

Sind Ibex

VU 37 A2cde

Iran, Iraq?, Pakistan, Turkmenistan

Capra aegagrus chialtanensis

Chiltan Goat CR 37 C2b

Pakistan

Capra aegagrus cretica

Cretan Goat

VU 37 DI+2

Greece

Capra falconeri falconeri

Flare-horned Markhor EN 37 C2a

India, Pakistan

Capra falconeri heptneri

Tadjik Markhor

CR 37 C2a

Tajikistan, Turkmenistan, Uzbekistan

Capra falconeri megaceros

Straight-horned Markhor EN 37 C2a

Afghanistan, Pakistan

Capra pyrenaica hispanica

LR 37 cd Spain

Capra pyrenaica pyrenaica

Pyrenean Ibex

CR 37 D1

Spain

Capra pyrenaica victoriae

Gredos Ibex

VU 37 D2

Spain

Capricornis sumatraensis maritimus

Indochinese Serow

VU 37 A2cd

Cambodia, Laos, Myanmar,

Thailand, Viet Nam

Capricornis sumatraensis

milneedwardsii

Chinese Serow

VU 37 A2cd

China

Capricornis sumatraensis rubidus

Red Serow

EN 37 A2cd

Bangladesh, India, Myanmar

Capricornis sumatraensis sumatraensis

Sumatran Serow

EN 37 A2cd

Indonesia, Malaysia

Capricornis sumatraensis thar Himalayan Serow

VU 37 A2cd

Bhutan, China, India, Nepal

Cephalophus nigrifrons rubidus Ruwenzori Black-fronted Duiker

EN 9 Alc

Uganda, Zaire?

Cephalophus ogilbyi crusalbum

White-legged Duiker

LR 9 nt

Congo?, Gabon

Connochaetes taurinus albojubatus Eastern White-bearded Wildebeest

LR 9 cd

Kenya, Tanzania

Connochaetes taurinus cooksoni

Cookson's Wildbeest

LR 9 cd Malawi, Zambia

Connochaetes taurinus johnstoni

Nyassa Wildebeest LR 9 cd

Malawi (ex), Mozambique, Tanzania

Connochaetes taurinus mearnsi

Western White-bearded Wildebeest

LR 9 cd

Kenya, Tanzania

Connochaetes taurinus taurinus Blue Wildebeest

LR 9

Angola, Botswana, Mozambique, Namibia, South Africa, Swaziland, Zambia, Zimbabwe

Damaliscus dorcas dorcas Bontebok

VU 9 D2 South Africa

Damaliscus dorcas phillipsi Blesbok

LR 9

Botswana [int], Lesotho, Namibia [int], South Africa, Swaziland, Zimbabwe [int]

Damaliscus lunatus jimela

Topi

LR 9

Burundi (ex), Kenya, Rwanda, Tanzania, Uganda, Zaire

Damaliscus lunatus korrigum Korrigum

VU 9 Ala

Benin, Burkina Faso, Cameroon, Gambia (ex), Ghana (ex), Guinea (ex?), Guinea-Bissau (ex), Mali (ex), Mauritania (ex), Niger, Nigeria, Senegal (ex), Togo (ex?)

Damaliscus lunatus lunatus

Tsessebe

LR 9 cd

Angola, Botswana, Mozambique (ex), Namibia, South Africa, Swaziland (ex), Zambia, Zimbabwe

Damaliscus lunatus tiang

Tiang

LR 9

Central African Republic, Chad, Ethiopia, Kenya, Sudan, Uganda

Damaliscus lunatus topi

Coastal Topi

LR 9 cd

Kenya, Somalia

Gazella dorcas pelzelni

Pelzeln's Gazelle

VU 9 C1

Djibouti, Somalia

Gazella gazella acaciae

Acacia Gazelle CR 9 A1c, C2b

Israel

Gazella gazella cora

Arabian Mountain Gazelle

LR 9

Oman, Saudi Arabia, United Arab Emirates, Yemen

Gazella gazella farasani

Farasan Gazelle

VU 9 DI

Saudi Arabia

Gazella gazella gazella

Palestine Mountain Gazelle

LR 9 cd

Israel, Jordan, Lebanon (ex), Syria

Gazella gazella muscatensis

Muscat Gazelle CR 9 C2a

Oman

Gazella rufifrons tilonura

Heuglin's Gazelle VU 9 C1

Eritrea, Ethiopia, Sudan

Gazella subgutturosa marica

Arabian Sand Gazelle

VU 9 C2a

Bahrain, Iran?, Jordan, Kuwait, Oman, Saudi Arabia, Syria?, United Arab Emirates, Yemen?

Gazella thomsonii albonotata

Mongalla Gazelle

LR 9 nt Ethiopia, Sudan

Hippotragus niger variani Giant Sable Antelope

CR 9 A1d+2d, C1+2b

Angola



Kobus ellipsiprymnus defassa Defassa Waterbuck

LR 9 cd
Angola, Benin, Burkina Faso,
Burundi, Cameroon, Central African
Republic, Chad, Congo, Côte
d'Ivoire, Ethiopia, Gabon, Gambia
(ex?), Ghana, Guinea,
Guinea-Bissau, Kenya, Mali,
Nigeria, Rwanda, Senegal, Sierra
Leone, Sudan, Tanzania, Togo,
Uganda, Zaire, Zambia

Kabus ellipsiprymnus ellipsiprymnus Ellipsen Waterbuck

LR 9 cd Botswana, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Somalia, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

Kobus kab kab Buffon's Kob

LR ° cd Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Gambia (ex), Ghana, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone (ex), Togo

Kobus kob leucotis
White-eared Kob
LR 9 nt

Ethiopia, Sudan, Uganda

Kobus kob thomasi
Uganda Kob
LR ° cd
Kenya (ex), Sudan,
Tanzania (ex),
Uganda, Zaire

Kobus leche kafuensis Kafue Lechwe

VU 9 D2
Zambia

Kobus leche leche Red Lechwe

LR <sup>9</sup> cd Angola, Botswana, Namibia, Zaire, Zambia

Kobus leche robertsi Roberts' Lechwe EX 9

Zambia

Kobus leche smithemani
Black Lechwe

VU 9 D2
Zambia

China

Naemorhedus baileyi baileyi Tibetan Red Goral VU <sup>37</sup> A2cd Naemorhedus baileyi cranbrooki Red Goral

VU <sup>37</sup> A2cd India, Myanmar

Naemorhedus caudatus caudatus Long-tailed Goral

VU <sup>37</sup> A2cd China

Naemorhedus caudatus evansi Evans' Long-tailed Goral

VU 37 A2cd

Laos?, Myanmar, Thailand

Naemorhedus caudatus griseus South China Goral

VU <sup>37</sup> A2cd China

Naemarhedus caudatus raddeanus Amur Goral

VU <sup>37</sup> A2cd China, North Korea, Russia, South Korea

Naemorhedus goral bedfordi Western Himalayan Goral

LR <sup>37</sup> nt India, Pakistan

Naemorhedus goral goral Brown Himalayan Goral

LR <sup>37</sup> nt Bhutan, China, India, Nepal

Oreotragus oreotragus porteousi Western Klipspringer

EN 9 Alc, Cl Nigeria

Oryx gazella beisa Beisa Oryx

> LR <sup>9</sup> cd Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda

Oryx gazella callotis Fringe-eared Oryx LR 9 cd

LR 9 cd Kenya, Tanzania

Oryx gazella gazella Gemsbok

LR <sup>9</sup> cd Angola, Botswana, Namibia, South Africa, Zimbabwe

Ourebia ourebi haggardi

Haggard's Oribi VU 9 C1 Kenya, Somalia

Kenya

Ourebia ourebi keniae Kenya Oribi EX <sup>9</sup> Ovis ammon ammon

Altai Argali VU 37 A2cde, C1

China, Mongolia, Russia

Ovis ammon collium

VU <sup>37</sup> A2cde, C1 Kazakhstan

Ovis ammon darwini Mongolian Argali, Gobi Argali EN <sup>37</sup> Cl China, Mongolia

Ovis ammon hodgsonii Tibetan Argali VU 37 A2cde

China, India, Nepal

Ovis ammon jubata

Northern Chinese Argali

EN <sup>37</sup> C1+2a, D1 China

Ovis ammon karelini
Tien Shan Argali
VU <sup>37</sup> A2cde, C1+2a
China, Kazakhstan, Kyrgyzstan

Ovis ammon nigrimontana Kara Tau Argali CR <sup>37</sup> C2b Kazakhstan

Ovis ammon palii
Marco Polo Argali
VU <sup>37</sup> A2cde, C1
Afghanistan, China, Pakistan,
Tajikistan

Ovis canadensis californiana Rimrock Bighorn LR <sup>37</sup> cd

Ovis canadensis cremnobates
Peninsular Bighorn Sheep
EN 37 C1+2a

Mexico, USA

Ovis canadensis mexicana

Mexican Bighorn Sheep

VU <sup>37</sup> D1 Mexico, USA

Canada, USA

Ovis canadensis nelsoni Nelson's Bighorn LR 37 cd

LR 37 cd USA

Ovis canadensis weemsi Weems' Bighorn Sheep

CR <sup>37</sup> C2a Mexico

Ovis nivicola borealis
Putorean Snow Sheep
VU 37 D2
Russia

Ovis nivicola nivicola

LR 37 nt Russia

Ovis orientalis arkal

Transcaspian Urial

VU 37 A2cde

Iran, Turkmenistan, Uzbekistan

Ovis orientalis bocharensis

Bukhara Urial

EN 37 A1cde, C1+2a Tajikistan, Turkmenistan, Uzbekistan

Ovis orientalis cycloceros

Afghan Urial

VU 37 C1

Afghanistan, Iran?, Pakistan, Turkmenistan

Ovis orientalis gmelinii

Armenian Mouflon

VU 37 A2cde

Armenia, Azerbaijan, Iran, Iraq?, Turkey

Ovis orientalis isphahanica

Esfahan Mouflon VU 37 A2c

lran

Ovis orientalis laristanica

Laristan Mouflon

VU 37 A2c

1ran

Ovis orientalis musimon

European Mouflon

VU 37 A2cde, D1+2

France, Italy

Ovis orientalis ophion

Cyprus Mouflon

EN 37 Ala

Cyprus

Ovis orientalis punjabiensis

Punjab Urial

EN 37 A1cde, C1+2a

Pakistan

Ovis orientalis severtzovi

Severtzov's Urial

EN 37 A2cde, C2b

Uzbekistan

Ovis orientalis vignei

Ladahk Urial

EN 37 A2cde, C1+2a

India, Pakistan

Pseudois nayaur nayaur

LR 37 nt

Bhutan, China, India, Nepal, Pakistan

Pseudois nayaur szechuanensis

LR 37 nt

China

Redunca fulvorufula adamauae Western Mountain Reedbuck

EN 9 C1 Cameroon, Nigeria

Redunca fulvorufula chanleri

Chanler's Mountain Reedbuck

LR 9 nt

Ethiopia, Kenya, Sudan, Tanzania, Uganda

Redunca fulvorufula fulvorufula Southern Mountain Reedbuck

LR 9

Botswana, Lesotho, Mozambique, South Africa, Swaziland

Rupicapra pyrenaica ornata

Apennine Chamois

EN 37 D1 Italy

Rupicapra rupicapra asiatica

Turkish Chamois

 $DD^{37}$ 

Turkey

Rupicapra rupicapra cartusiana

Chartreuse Chamois

CR 37 C2b, D1

France

Rupicapra rupicapra caucasica

Caucasian Chamois

VU 37 C1

Azerbaijan, Georgia, Russia

Rupicapra rupicapra tatrica

Tatra Chamois

EN 37 C1

Poland, Slovakia

Soigo tatarica mongolica

Mongolian Saiga EN 9 C1

Mongolia

Saiga tatarica tatarica

Russian Saiga

VU 9 Ala

China (ex), Kazakhstan,

Mongolia (ex), Russia,

Turkmenistan

Tragelaphus derbianus derbianus

Western Giant Eland

EN 9 C1+2b

Côte d'Ivoire (ex), Gambia (ex), Ghana (ex?), Guinea (ex?), Guinea-Bissau, Mali (ex?), Senegal,

Togo (ex?)

Tragelaphus derbianus gigas

Eastern Giant Eland

LR 9 nt

Cameroon, Central African Republic, Chad (ex?), Nigeria (ex), Sudan,

Uganda (ex?), Zaire

Tragelaphus eurycerus eurycerus Westen Bongo

LR 9 nt

Benin (ex?), Cameroon, Central African Republic, Congo, Côte d'Ivoire, Gabon, Ghana, Guinea, Liberia, Sierra Leone, Sudan, Togo (ex), Zaire

Tragelaphus eurycerus isaaci Eastern Bongo

EN 9 B1+2b

Kenya, Uganda (ex)

Order RODENTIA

Family APLODONTIDAE

Aplodontia rufa nigra

Point Arena Mountain Beaver

VU 82 B1+2de

USA

Aplodontia rufa phaea

Point Reyes Mountain Beaver

VU 82 B1+2e

USA

Family SCIURIDAE

Cynomys ludovicianus arizonensis Arizona Black-tailed Prairie Dog

 $DD^{82}$ 

Mexico, USA

Glaucomys sabrinus californicus

San Bernardino Flying Squirrel

DD 82

**USA** 

Glaucomys sabrinus coloratus

Carolina Flying Squirrel

VU 82 A2c, B1+2c

USA

Glaucomys sabrinus fuscus

Virginia Flying Squirrel

VU 82 A2c, B1+2c

Glaucomys sabrinus griseifrons

Prince of Wales Island Flying

Squirrel

EN 82 A1c+2c, B1+2c

USA

Marmota caligata sheldoni

Montague Island Hoary Marmot  $DD^{82}$ 

USA

Marmota caligata vigilis Glacier Bay Hoary Marmot

DD 82 USA

Sciurus niger avicennia

Big Cypress Fox Squirrel

LR 82 cd USA



Sciurus niger cinereus Delmarva Fox Squirrel LR 82 cd USA Sciurus niger shermani Sherman's Fox Squirrel LR 82 nt USA Sciurus niger vulpinus Eastern Fox Squirrel DD 82 USA Spermophilus brunneus brunneus Norhern Idaho Ground Squirrel CR 82 B1+2d USA Spermophilus brunneus endemicus Southern Idaho Ground Squirrel VU 82 B1+3d USA Spermophilus elegans nevadensis Nevada Ground Squirrel  $DD^{82}$ USA Spermophilus lateralis wortmanni Green River Basin Golden-mantled Ground Squirrel DD 82 Spermophilus parryii kodiacensis Kodiak Ground Squirrel  $DD^{82}$ USA Spermophilus parryii lyratus St. Lawrence Island Ground Squirrel DD 82 USA Spermophilus parryii nebulicola Shumagin Ground Squirrel  $DD^{82}$ **USA** Spermophilus tereticaudus chlorus Palm Springs Round-tailed Ground Squirrel

DD 82 USA Spermophilus tridecemlineatus Big Horn Thirteen-lined Ground Squirrel  $DD^{82}$ USA Tamias minimus atristriatus Pefiasco Least Chipmunk CR 82 A1a, D1 USA

Tamias minimus selkirki Selkirk Least Chipmunk VU 82 D2 Canada Tamias quadrivittatus australis Organ Mountains Chipmunk VU 82 C2a, D2 USA Tamias umbrinus nevadensis Hidden Forest Chipmunk CR 82 Ala USA Tamias umbrinus sedulus Henry Mountains Chipmunk DD 82 USA Tamiasciurus hudsonicus grahamensis Mount Graham Red Squirrel CR 82 C2b USA Family CASTORIDAE Castor canadensis phaeus Admiralty Island Beaver  $DD^{-82}$ USA Family GEOMYIDAE Geomys personatus maritimus Maritime Pocket Gopher VU 82 D2 USA Geomys personatus streckeri Carrizo Springs Pocket Gopher VU 82 D2 USA Geomys pinetis cumberlandius Cumberland Island Picket Gopher VU 82 D2 USA Geomys pinetis fontanelus Sherman's Pocket Gopher VU 82 D2 USA Geomys pinetis goffi Goff's Southeastern Pocket Gopher EX 82 USA Thomomys mazama couchi Puget Sound Pocket Gopher VU 82 B1+2c Thomomys mazama glacialis Roy Prairie Pocket Gopher VU 82 B1+2c

Thomomys mazama louiei Cathlamet Pocket Gopher CR 82 A1c, C2b USA Thomomys mazama pugetensis Olympia Pocket Gopher VU 82 B1+2c Thomomys mazama tacomensis Tacoma Pocket Gopher EX 82 USA Thomomys mazama tumuli Rocky Prairie Pocket Gopher VU 82 B1+2c USA Thomomys mazama yelmensis Yelm Prairie Pocket Gopher VU 82 B1+2c **USA** Thomomys talpoides douglasi Vancouver Pocket Gopher VU 82 B1+2c USA Family **HETEROMYIDAE** Chaetodipus californicus femoralis Dalzura Pocket Mouse DD 82 Mexico, USA Chaetodipus fallax fallax San Diego Pocket Mouse DD 82 Mexico, USA Chaetodipus fallax pallidus Mountain Spring Pocket Mouse  $DD^{-82}$ USA Dipodomys heermanni berkeleyensis Berkeley Hills Kangaroo Rat VU 82 B1+2c USA Dipodomys heermanni morroensis Morro Bay Kangaroo-rat CR 82 B1+2c, D1 USA Dipodomys merriami collinus Earthquake Valley Kangaroo Rat  $DD^{82}$ **USA** Dipodomys merriami parvus San Bernardino Kangaroo Rat DD 82 USA Dipodomys microps alfredi Gunnison Island Kangaroo Rat

DD 82

USA

USA

USA

Zapus trinotatus orarius Microtus longicaudus leucophaeus Dipodomys microps leucotis House Rock Valley Kangaroo Rat Point Reves Jumping Mouse Mount Graham Long-tailed Vole VU 82 B1+2c LR 82 cd DD 82 USA USA USA Dipodomys nitratoides exilis Microtus mogollonensis Fresno Kangaroo Rat hualpaiensis Family MURIDAE CR 82 B1+2c Huaiapai Vole VU 82 B1+2c, D2 USA Clethrionomys gapperi solus USA Revillagigedo Island Red-backed Dipodomys nitratoides nitratoides Tipton Kangaroo Rat Vole Microtus montanus codiensis DD 82 CR 82 Alc Cody Mountain Vole USA DD 82 USA USA Dicrostonyx unalascensis stevensoni Microdipodops megacephalus Microtus montanus fucosus atrirelictus Umnak Island Collared Lemming Owyhee River Kangaroo Mouse DD 82 Pahranagat Valley Montane Vole VIJ 82 D2 VU 82 D2 USA USA Dicrostonyx unalascensis Microdipodops megacephalus nexus Microtus montanus nevadensis unalascensis Ash Meadows Montane Vole Izenhood Kangaroo Mouse Unalaska Island Collared Lemming VU 82 D2 DD 82 DD 82 USA USA USA Microtus montanus zygomaticus Microdipodops pallidus restrictus Microtus abbreviatus abbreviatus Big Horn Montane Vole Soda Spring Valley Kangaroo Mouse Hall Island Insular Vole DD 82 VU 82 D2 DD 82 USA **USA** USA Microtus oeconomus amakensis Perognathus alticola alticola Microtus abbreviatus fisheri Amak Tundra Vole White-eared Pocket Mouse St Matthew Island Insular Vole  $DD^{82}$ CR 82 B1+2b  $DD^{82}$ USA **USA** USA Microtus oeconomus elymocetes Perognathus longimembris bangsi Microtus californicus mohavensis Montague Tundra Vole Palm Springs Pocket Mouse Mojave River Vole DD 82  $DD^{82}$ VU 82 A1d+2d, D2 USA USA USA Microtus oeconomus innuitus Perognathus longimembris Microtus californicus scirpensis St Lawrence Island Tundra Vole brevinasus Amargosa Vole DD 82 Los Angeles Pocket Mouse VU 82 B1+3cd **USA** VU 82 B1+2c USA Microtus oeconomus popofensis Microtus californicus stephensi Shumagin Islands Tundra Vole Perognathus longimembris Stephen's California Vole DD 82 internationalis  $\overrightarrow{DD}$  82 **USA** Jacumba Pocket Mouse USA DD 82 Microtus oeconomus punukensis Microtus chrotorrhinus carolinensis Mexico, USA Punuk Islands Tundra Vole Southern Rock Vole DD 82 Perognathus longimembris pacificus LR 82 nt USA Pacific Pocket Mouse **USA** CR 82 B1+2c, C1+2ab Microtus oeconomus sitkensis Microtus chrotorrhinus ravus **USA** Alexander Islands Tundra Vole Labrador Rock Vole DD 82  $DD^{-82}$ USA Family DIPODIDAE Canada Microtus pennsylvanicus Zapus hudsonius compestris Microtus longicaudus bernardinus dukecampbelli Black Hills Meadow Jumping Mouse San Bernardino Long-tailed Vole Florida Saltmarsh Vole DD 82 VU 82 B1+2c VU 82 D2 USA USA USA Zapus hudsonius preblei Microtus longicaudus coronarius Microtus pennsylvanicus kincaidi Preble's Meadow Jumping Mouse Alexander Islands Long-tailed Vole Potholes Meadow Vole EN 82 B1+2c DD 82 LR 82 nt

USA

USA



Microtus townsendii cowani Peromyscus gossypinus allapaticola Synaptomys cooperi paludis Triangle Island Vole Key Largo Cotton Mouse Kansas Bog Lemming LR 82 cd VU 82 D2 EX 82 Canada USA USA Neotoma floridana smalli Peromyscus gossypinus restrictus Synaptomys cooperi relictus Key Largo Woodrat Chadwick Beach Cotton Mouse Nebraska Bog Lemming EX 82 EN 82 C2b EX 82 USA USA USA Peromyscus leucopus ammodytes Neotoma fuscipes annectens Monomy White-footed Mouse San Francisco Dusky-footed Woodrat DD 82 DD 82 Order LAGOMORPHA USA USA Peromyscus polionotus allophrys Family OCHOTONIDAE Neotoma fuscipes luciana Monterey Dusky-footed Woodrat Choctawhatchee Beach Mouse Ochotona alpina hoffmanni EN 82 B1+2c DD 82 VU 104 D2 USA USA Mongolia Peromyscus polionotus ammobates Neotoma fuscipes riparia Ochotona cansus morosa Alabama Beach Mouse San Joaquin Valley Woodrat  $DD^{-104}$ EN 82 B1+2c CR 82 B1+2c China USA USA Ochotona cansus sorella Peromyscus polionotus decoloratus Neotoma lepida intermedia EN 104 A2d Ponce de Leon Beach Mouse San Diego Desert Woodrat EX 82 China DD 82 USA Ochotona pallasi hamica Mexico, USA CR 104 A1a+2d Peromyscus polionotus leucocephalus Onchomys leucogaster durranti China, Mongolia Santa Rosa Beach Mouse Durant's Northern Grasshoper Mouse LR 82 nt DD 82 Ochotona pallasi sunidica USA EN 104 A2d **USA** Peromyscus polionotus peninsularis China Onchomys torridus ramona St Andrews Beach Mouse Ochotona princeps goldmani Southern Grasshopper Mouse EN 82 B1+2c DD 82 VU 104 D1 USA Mexico, USA Peromyscus polionotus phasma Onchomys torridus tularensis Ochotona princeps lasalensis Anastasia Island Beach Mouse VU 104 D1 Tulare Grasshopper Mouse EN 82 B1+2c DD 82 USA LISA USA Ochotona princeps nevadensis Peromyscus polionotus trissyllepsis VU 104 D1 Ondatra zibethicus ripensis Perdido Key Beach Mouse Rio Grande Muskrat USA CR 82 B1+2c DD 82 USA Ochotona princeps nigrescens Mexico, USA VU 104 D1 Reithrodontomys raviventris Onychomys leucogaster durranti USA halicoetes Durrant's Northern Grasshopper Salt-marsh Harvest Mouse Ochotona princeps obscura Mouse LR 82 cd VU 104 B1+2c DD 82 USA USA Reithrodontomys raviventris Ochotona princeps sheltoni Onychomys torridus ramona raviventris VU 104 D1 Southern Grasshopper Mouse Red-bellied Harvest Mouse USA DD 82 EN 82 A2c, B1+2c Ochotona princeps tutelata Mexico, USA USA VU 104 B1+2c Onychomys torridus tularensis Sigmodon arizonae arizonae USA Tulare Grasshopper Mouse Arizona Cotton Rat Ochotona thibetana huangensis DD 82 EX 82 EN 104 A2d USA USA China Oryzomys palustris natator Sigmodon fulviventer goldmani Ochotona thibetana sikimaria Marsh Rice Rat Hot Springs Cotton Rat CR 104 A1ac DD 82 EX 82

USA

USA

India

#### Family LEPORIDAE

Sylvilagus palustris hefneri Lower Keys Marsh Rabbit EN <sup>104</sup> Alab, B1+2cd, C2a, D1 USA

#### Class REPTILIA

#### Order SAURIA

Family AGAMIDAE

Tympanocryptis lineata pinguicolla South-eastern Lined Earless Dragon VU <sup>14</sup> A1c, B1+2c Australia

## Family IGUANIDAE

Cyclura carinata bartschi Booby Cay Ground Iguana CR <sup>73</sup> B1+2bce, C2b Bahamas

Cyclura carinata carinata
Turks and Caicos Ground Iguana
CR <sup>73</sup> B1+2abcde
Turks and Caicos Islands

Cyclura cornuta cornuta VU <sup>126</sup> Alacde Dominican Republic, Haiti

Cyclura cornuta stejnejeri EN <sup>182</sup> Alcde+2ce Puerto Rico

Cyclura cychlura cychlura Andros Island Rock Iguana VU <sup>23</sup> Alace, B1+2b, C1 Bahamas

Cyclura cychlura figginsi Exuma Island Rock Iguana EN <sup>23</sup> C1 Bahamas

Cyclura cychlura inornata Allen's Cay Rock Iguana EN <sup>23</sup> B1+2c Bahamas

Cyclura nubila caymanensis Cayman Island Ground Iguana CR <sup>73</sup> B1+2abcde Cayman Islands

Cyclura nubila lewisi
Cayman Island Ground Iguana
CR <sup>73</sup> B1+2bce, C2b
Cayman Islands

Cyclura nubila nubila Cuban Ground Iguana VU <sup>4</sup> Alacde+2ce Cuba Cyclura rileyi cristata San Salvador Rock Iguana CR <sup>39</sup> B1+2e, C2b Bahamas

Cyclura rileyi nuchalis San Salvador Rock Iguana EN <sup>39</sup> B1+2c, C2a Bahamas

Cyclura rileyi rileyi San Salvador Rock Iguana EN <sup>39</sup> C2a Bahamas

#### Family LACERTIDAE

Lacerta vivipara pannonica VU 65 B1+2bcd, C2a Austria, Hungary

#### Family PYGOPODIDAE

Aprasia rostrata rostrata Hermite Island Worm-lizard VU <sup>14</sup> D2 Australia

#### Family SCINCIDAE

Egernia pulchra longicauda Jurien Bay Rock-skink VU <sup>14</sup> D2 Australia

Egernia stokesii aethiops VU <sup>14</sup> D2 Australia

Egernia stokesii badia EN <sup>14</sup> Alc Australia

Eulamprus tympanum marnieae EN <sup>14</sup> B1+2c Australia

#### Order SERPENTES

#### Family BOIDAE

Epicrates monensis granti
Virgin Islands Boa
EN <sup>174</sup> B1+2bcde
Puerto Rico, Virgin Islands (British),
Virgin Islands (US)
Epicrates monensis monensis
Mona Island Boa

EN 174 C2b Puerto Rico

Morelia spilota imbricata
Western Australian Carpet Python
LR <sup>14</sup> nt
Australia

#### Family COLUBRIDAE

Natrix natrix cetti
Sardinian Grass Snake
CR 65 Alac, B1+2abcde, C2a
Italy

Natrix natrix schweizeri
CR 65 Albcd+2bcd, B1+2bce, C2a
Greece

#### Family ELAPIDAE

Notechis ater ater
Krefft's Tiger Snake
VU <sup>14</sup> B1+2c
Australia

#### Family VIPERIDAE

Vipera ursinii moldavica CR <sup>65</sup> B1+2abcde, C1+2a Romania

Vipera ursinii rakosiensis Orsini's Viper EN 65 B1+2bcde, C2a Austria (ex?), Hungary

## Order TESTUDINES

#### Family CHELONIIDAE

Chelonia mydas
Green Turtle
(Mediterranean population)
CR <sup>5</sup> Ala, B1+2ce, E
Cyprus, Turkey
[Mediterranean and Black Sea]

#### Family TESTUDINIDAE

Geochelone nigra abingdoni
Abingdon Island Tortoise
EW 176
Ecuador (Galápagos Is)
Geochelone nigra becki

Volcan Wolf Tortoise VU <sup>176</sup> D1+2 Ecuador (Galápagos Is)

Geochelone nigra chathamensis Chatham Island Tortoise VU 176 D1+2

Ecuador (Galápagos Is)

Geochelone nigra darwini

James Island Tortoise

EN <sup>176</sup> C2a Ecuador (Galápagos ls)

Geochelone nigra ephippium Duncan Island Tortoise EW 176

Ecuador (Galápagos 1s)

Geochelone nigra galapagoensis

Charles Island Tortoise

EX 176

Ecuador (Galápagos 1s)



Geochelone nigra guntheri Sierra Negra Tortoise

EN 176 C2a

Ecuador (Galápagos Is)

Geochelone nigra hoodensis

Hood Island Tortoise

CR 176 D1

Ecuador (Galápagos 1s)

Geochelone nigra microphyes

Volcan Darwin Tortoise

VU 176 D1+2

Ecuador (Galápagos Is)

Geochelone nigra porteri

Indefatigable Island Tortoise

EN 176 C2a

Ecuador (Galápagos ls)

Geochelone nigra vandenburghi

Volcan Alcedo Tortoise

VU 176 D2

Ecuador (Galápagos 1s)

Geochelone nigra vicina

Iguana Cove Tortoise EN 176 C2a

Ecuador (Galápagos 1s)

Testudo graeca nikolskii

CR 65 Alabcde+2bcde

Georgia, Russia

#### Family TRIONYCHIDAE

Trionyx triunguis

African Softshell Turtle

(Mediterranean population)

CR 5 C2a

Israel, Lebanon, Syria, Turkey

#### Class AMPHIBIA

#### Order ANURA

Family HYLIDAE

Litoria verreauxii alpina

Whistling Tree Frog

VU 14 Alac

Australia

#### Family PELOBATIDAE

Pelobates fuscus insubricus

Italian Spadefoot Toad

EN 65 Alc, B1+2cd

Italy, Switzerland

#### Order CAUDATA

#### Family SALAMANDRIDAE

Salamandra atra aurorae

Golden Salamander

CR 65 B1+2bc

Italy

#### Class ACTINOPTERYGII

#### Order ACIPENSERIFORMES

## Family ACIPENSERIDAE

Acipenser baerii baerii

Siberian Sturgeon

EN 170 A2d

Russia

[R. Ob, R. Taz]

Acipenser baerii baikalensis

Baikal Sturgeon

EN 170 Alace

Russia

[L. Baikal]

Acipenser baerii stenorrhynchus

Lena River Sturgeon

VU 170 A2d

Russia

[R. Yenisei, R. Lena and east

Siberian rivers]

Acipenser gueldenstaedti (S)

Russian Sturgeon

(Caspian Sea stock)

EN 170 A2d

Azerbaijan, Iran, Kazakhstan,

Russia, Turkmenistan

Acipenser gueldenstaedti (S)

Russian Sturgeon

(Sea of Azov stock)

EN 170 Alacde+2d

Ruccia

[Mediterranean and Black Sea]

Acipenser gueldenstaedti (S)

Russian Sturgeon (Black Sea stock)

EN 170 Alacde

Hungary, Romania, Ukraine,

Yugoslavia

[Mediterranean and Black Sea]

Acipenser nudiventris (S)

Ship Sturgeon

(Black Sea stock)

EN 170 Alacde+2d

Russia, Ukraine

[Mediterranean and Black Sea]

Acipenser nudiventris (S)

Ship Sturgeon

(Caspian Sea stock)

EN 170 Alacde+2d

Azerbaijan, Iran, Kazakhstan

Acipenser nudiventris (S)

Ship Sturgeon

(Aral Sea stock).

 $EX^{-170}$ 

Kazakhstan, Uzbekistan

[Mediterranean and Black Sea]

Acipenser nudiventris (S)

Ship Sturgeon

(R. Danube population)

CR 170 Alcd+2cd

Hungary, Romania

Acipenser oxyrinchus desotoi

Gulf Sturgeon

LR 170 nt

Mexico, USA

[Atlantic (western central)]

Acipenser oxyrinchus oxyrinchus

Atlantic Sturgeon

LR 170 nt

Canada, USA

[Atlantic (northwest, western central)]

Acipenser persicus (S)

Persian Sturgeon

(Black Sea stock)

EN 170 Alac

Georgia, Russia, Turkey

[Mediterranean and Black Sea]

Acipenser persicus (S)

Persian Sturgeon

(Caspian Sea stock)

VÛ 170 Alacde

Azerbaijan, Iran, Russia

Acipenser ruthenus (S)

Sterlet

(Caspian and Black Sea drainage stock)

VU 170 Alcd

Hungary, Romania, Russia, Ukraine,

Yugoslavia [Mediterranean and Black Sea]

Acipenser ruthenus (S)

Sterlet

VU 170 A1c

Russia

[R. Irtysh, R. Ob, R. Yenisei]

Acipenser stellatus (S)

Stellate Sturgeon

(Caspian Sea stock)

VU 170 Alacde+2d

Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan

Acipenser stellatus (S)

Stellate Sturgeon

(Sea of Azov stock) EN 170 A2d

Russia

[Mediterranean and Black Sea]

Acipenser stellatus (S)

Stellate Sturgeon

(Black Sea stock)

EN 170 Alacde+2d

Hungary, Romania, Ukraine,

Yugoslavia

Acipenser transmontanus (S)

White Sturgeon

EN 170 Ala, B1+2ce

USA

[R. Kootenai]

Huso huso (S)

Beluga

(Sea of Azov stock)

CR 170 Alacde+2d

Russia

[Mediterranean and Black Sea]

Huso huso (S)

Beluga

(Black Sea stock)

EN 170 Alacde+2d

Hungary, Romania, Russia, Ukraine,

Yugoslavia

[Mediterranean and Black Sea]

Huso huso (S)

Beluga

(Caspian Sea stock)

EN 170 Alacde+2d

Azerbaijan, Iran, Kazakhstan,

Russia, Turkmenistan

Huso huso (S)

Beluga

(Adriatic Sea stock)

 $EX^{-170}$ 

Italy

[Mediterranean and Black Sea]

#### Order CLUPEIFORMES

Family CLUPEIDAE

Clupeonella abrau muhlisi

VU 185 B1+2c

Turkey

## Order CYPRINIFORMES

#### Family CYPRINIDAE

Carassius carassius (S)

Crucian Carp

LR 101 nt

Austria, Belarus, Belgium, Bosnia and Herzegovina?, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Yugoslavia

Cyprinus carpio (S)

Wild Common Carp

CR 101 A2ce

Austria, Bulgaria, Croatia, Hungary, Romania, Slovakia, Slovenia, Yugoslavia

[R. Danube]

Phoxinellus zeregii fahirae

Incilevrek Baligi

VU 185 D2

Turkey

Phoxinellus zeregii meandri

Ot Baligi

LR 185 nt

Turkey

Puntius asoka

Asoka Barb

EN 134 A1c, B1+2c

Sri Lanka

Rhodeus atremius suigensis

Suigen Zenitanago

DD 185

Japan

Rhodeus ocellatus smithi

Nippon Baratanago

CR 185 Alae, B1+2e Japan

#### Order CHARACIFORMES

### Family CHARACIDAE

Astyanax mexicanus jordani

Sardina Ciega

VU 49 Alac+2c, B1+2c, D2

Mexico

#### Order SALMONIFORMES

#### Family PLECOGLOSSIDAE

Plecoglossus altivelis ryukyuensis Ryukyu Ayu-fish

EN 185 Alac, B2abce+3abc Japan (Nansei-shoto)

#### Family SALMONIDAE

Stenodus leucichthys leucichthys Beloribitsa

EN 185 Cl

Azerbaijan?, Kazakhstan, Russia

#### Order CYPRINODONTIFORMES

#### Family POECILIDAE

Poeciliopsis occidentalis sonorensis VU 49 A1a+2bc, B1+2c

Mexico

## Order GASTEROSTEIFORMES

## Family PEGASIDAE

Eurypegasus draconis (S)

VU 178 A2d

Madagascar

[Indian Ocean (eastern, western),

Pacific (northwest, western central)]

Pegasus volitans (S)

(South China Sea stock)

VU 178 A2d

[Pacific (northwest)]

Pegasus volitans (S)

(Philippines stock)

VU 178 A2d

[Pacific (northwest)]

## Order PERCIFORMES

## Family PERCICHTHYIDAE

Maccullochella peelii mariensis

Mary River Cod CŘ 179 C2a

Australia

[R. Mary]

## Family CICHLIDAE

Cichlasoma urophtalmus ericymba Mojarra de Bulha

DD 49

Mexico

Harpagochromis guiarti complex

CR 97 Alace, B1+2acd

Uganda

[L. Victoria]

Sarotherodon galileus "Ejagham"

VU 168 D2

Cameroon

[L. Ejagham]

## Family XIPHIIDAE

Xiphias gladius (C)

(S)Times-BoldItalic"P9

Swordfish

(North Atlantic stock)

EN 151 Albd

[Atlantic (eastern central, northeast, northwest, western central)]

### Family SCOMBRIDAE

Thunnus alalunga (C) (S)

Albacore Tuna

(North Atlantic stock)

VU 177 Albd

[Atlantic (eastern central, northeast, northwest, western central)]

Thunnus alalunga (C) (S)

Albacore Tuna

(South Atlantic stock)

CR 177 Albd

[Atlantic (Antarctic, southeast, southwest)]

Thunnus obesus (C) (S)

Bigeye Tuna

(Pacific stock)

EN 177 Albd



[Pacific (eastern central, northeast, northwest, southeast, southwest, western central)]

Northern Bluefin Tuna (Western Atlantic stock) CR <sup>151</sup> Albd [Atlantic (northwest, southwest, western central)]

Thunnus thynnus (C) (S)

Thunnus thynnus (C) (S)
Northern Bluefin Tuna
(Eastern Atlantic stock)
EN 151 Albd
[Atlantic (eastern central, northeast,

## Class CRUSTACEA

#### Order AMPHIPODA

southeast)]

## Family HADZIIDAE

Hadzia fragilis stochi VU <sup>159</sup> D2 Italy

#### Family NIPHARGIDAE

Niphargus elegans zagrebensis EN <sup>159</sup> B1+2bcde Croatia, Slovenia

Niphargus ilidzensis slovenicus VU <sup>159</sup> D2 Slovenia

Niphargus orcinus orcinus VU 159 D2

Italy, Slovenia
Niphargus stygius stygius
VU 159 D2

#### Order DECAPODA

Italy, Slovenia

#### Family CAMBARIDAE

Orconectes australis packardi VU 7 B1+2c

USA
Orconectes inermis testii
VU ' B1+2c

USA
Orconectes meeki brevis
VU 7 B1+2c

USA

Procambarus lucifugus alachua

Alachua Light-fleeing Cave Crayfish

VU <sup>7</sup> B1+2c, D1 USA

Procambarus lucifugus lucifugus Withlocoochee Light-fleeing Cave Crayfish

EN 7 B1+2c USA Procambarus rogersi campestris VU <sup>7</sup> B1+2c USA

Procambarus rogersi expletus CR <sup>7</sup> B1+2c USA

Procambarus rogersi ochlocknensis VU 7 B1+2c, D1 USA

Procambarus rogersi rogersi VU 7 B1+2c, D1 USA

#### Order ISOPODA

## Family ASELLIDAE

Asellus aquaticus carniolicus EN 159 A2e, B1+2c Slovenia

Asellus aquaticus cavernicolus VU <sup>159</sup> D2 Italy, Slovenia

Asellus aquaticus cyclobranchialis EN 159 B1+2c

Proasellus parvani orientalis VU 159 D2 Slovenia

#### Family SPHAEROMATIDAE

Monolistra racovitzai conopyge EN <sup>159</sup> B1+2c Slovenia

#### Family TRICHONISCIDAE

Androniscus stygius dentatus VU <sup>159</sup> D2 Slovenia

#### Class INSECTA

#### Order LEPIDOPTERA

#### Family NYMPHALIDAE

Danaus affinis jimiensis VU <sup>105</sup> D2 Papua New Guinea

Danaus melanippus keteus VU 105 B1+2c

Indonesia

Euploea algea abjecta

Outcast Crow

VU 105 B1+2c Palau

Euploea algea eleutho VU <sup>105</sup> D2 Guam Euploea algea schmeltzi

VU 105 B1+2c Western Samoa

Euploea crameri albomaculata VU 105 D2

Indonesia

Euploea mulciber elwesii VU 105 B1+2c

Indonesia

Euploea radamanthus schreiberi VU 105 B1+2c Indonesia

Paratica weiskei thalassina VU <sup>105</sup> Bl+2c

Indonesia

Tirumala choaspes tumanana Sarangani Tiger VU 105 D2 Philippines

#### Order ODONATA

Japan

#### Family AESHNIDAE

Planaeschna ishigakiana ishigakiana EN <sup>123</sup> B1+2c

Planaeschna ishigakiana nagaminei EN <sup>123</sup> B1+2c Japan (Nansei-shoto)

Planaeschna risi sakishimana EN <sup>123</sup> B1+2c Japan

#### Family CALOPTERYGIDAE

Matrona basilaris japonica EN <sup>123</sup> B1+2c Japan (Nansei-shoto)

#### Family COENAGRIONIDAE

Coenagrion hylas freyi
Frey's Darnselfly
CR 123 B1+2c
Austria, Germany, Switzerland
Megalagrion amaurodytum peles
Pele Damselfly
CR 123 B1+2c
USA (Hawaiian Is)
Seychellibasis alluaudi alluaudi
CR 123 B1+2c
Seychelles

## Family CORDULEGASTERIDAE

Chlorogomphus brevistigmata okinawanus

EN <sup>123</sup> B1+2c Japan (Nansei-shoto) Chlorogomphus brunneus brunneus EN 123 B1+2c

Japan (Nansei-shoto)

Chlorogomphus brunneus keramensis

CR 123 B1+2c Japan (Nansei-shoto)

#### Family CORDULIIDAE

Hemicordulia mindana nipponica EN 123 B1+2c Japan

## Family EUPHAEIDAE

Bayadera brevicauda ishigakiana EN 123 B1+2c Japan

#### Family GOMPHIDAE

Asiagomphus amamiensis amamiensis

EN 123 B1+2c Japan (Nansei-shoto)

Asiagomphus amamiensis okinawanus

EN 123 B1+2c Japan (Nansei-shoto)

Erpetogomphus lampropeltis lampropeltis

EN 123 B1+2c USA

Ophiogomphus incurvatus alleghaniensis

Alleghany Snaketail Dragonfly VU 123 A2c **USA** 

Stylogomphus ryukyuensis asatoi EN 123 B1+2c

Japan (Nansei-shoto)

Stylogomphus ryukyuensis watanabei

EN 123 B1+2c Japan (Nansei-shoto)

#### Family LIBELLULIDAE

Eleuthemis beuttikoferi quadrigutta

Mozambique, Zimbabwe

Leucorrhinia intermedia ijimai EN 123 B1+2c Japan

Orthetrum poecilops miyajimaense EN 123 B1+2c Japan

## Family PLATYCNEMIDAE

Coeliccia flavicauda masakii EN 123 B1+2c

Japan

Coeliccia ryakyuensis amamii EN 123 B1+2c

Japan (Nansei-shoto)

Coeliccia ryakyuensis ryukyuensis

EN 123 B1+2c Japan (Nansei-shoto)

#### Class BIVALVIA

#### Order UNIONOIDA

#### Family MARGARITIFERIDAE

Margaritifera margaritifera durrovensis CR 115 Alce+2e

Ireland

#### Family UNIONIDAE

Epioblasma florentina curtisi CR 24 Alce

USA

Epioblasma obliquata obliquata EN 24 A2c

USA

Epioblasma obliquata perobliqua

CR 24 Alce USA

Epioblasma tarulosa gubernaculum CR 24 A1c

USA

Epioblasma torulosa rangiana

CR 24 A1c

USA

Epioblasma torulosa torulosa

CR 24 A1c

USA

Lampsilis reeviana brevicula

LR 24 nt USA

Lampsilis reeviana reeviana VÛ 24 A2c

USA

Lampsilis straminea claibornensis

LR 24 nt USA

Lampsilis straminea straminea

LR 24 nt USA

Lasmigona complanata alabamensis

LR 24 nt USA

Quadrula cylindrica cylindrica

LR 24 nt **USA** 

#### Class GASTROPODA

Order

#### ARCHAEOGASTROPODA

## Family HELICINIDAE

Pleuropoma zigzac ponapense DD 115

Federated States of Micronesia

Pleuropoma zigzac zigzac DD 115

Federated States of Micronesia

## Order MESOGASTROPODA

## Family CYCLOPHORIDAE

Maizania hildebrandti thikensis EN 172 B1+2ac Kenya

#### Family HYDROBIIDAE

Mexipyrgus churinceanus carranzae Mexipyrgus de Carranza Snail

VU 154 D2 Mexico

Mexipyrgus churinceanus

churinceanus

Mexipyrgus de Churince Snail VU 154 D2

Mexico

Mexipyrgus churinceanus escobedae

Mexipyrgus de Escobeda Snail VU 154 D2

Mexico

Mexipyrgus churinceanus lugoi

Mexipyrgus de Lugo Snail VU 154 D2

Mexico

Mexipyrgus churinceanus mojarralis

Mexipyrgus de West El Mojarral Snail

VII 154 D2 Mexico

Mexipyrgus churinceanus multilineatus

Mexipyrgus de East El Mojarral Snail

VU 154 D2 Mexico

## Order STYLOMMATOPHORA

## Family ACHATINELLIDAE

Achatinella apexfulva vittata EX 115

USA (Hawaiian Is)

Achatinella bulimoides rasea EX 115

USA (Hawaiian Is)



## Family ALYCAEIDAE

Chamalychaeus itonis nakashimai DD 115

Japan

#### Family BRADYBAENIDAE

Chlorilis hungerfordiana rufopila

VU 180 D2

Hong Kong

Euhadra scaevola mikawa

**DD** 115 Japan

#### Family BULIMULIDAE

Tornigenus gibberulus Digerus

EX 108

Brazil

Tornigenus turbinatus Biolocus

EX 108

Brazil

## Family CAMAENIDAE

Glyptorhagada wilkawillina umbilicata

LR 161 nt

Australia

#### Family CLAUSILIIDAE

Alopia bielzii clathrata

LR 167 nt

Slovakia

Macrogastra lineolata euzieriana

LR 115 nt

France

#### Family HELICIDAE

Leptaxis erubescens portosancti

VU 115 D2

Portugal (Madeira)

Family

#### HELMINTHOGLYPTIDAE

Eremarionta indioensis cathedralis

Cathedral Desert Snail

DD 115

USA

Eremarionta rowelli bakerensis

Baker Desert Snail

DD 115

LISA

Eremarionta rowelli mccoiana

McCoy Desert Snail

DD 115

**USA** 

Helminthoglypta arrosa pomoensis

DD 115

USA

Helminthoglypta expansilabris mattolensis

Cape Shoulderband

DD 115

USA

Helminthoglypta nickliniana awania

Nicklin's Peninsula Snail

DD 115

USA

Helminthoglypta nickliniana

bridgesi

DD 115

**USA** 

Helminthoglypta nickliniana contracosta

DD 115

Helminthoglypta sequoicola consors

 $DD^{-115}$ 

USA

Helminthoglypta stiversiana miwoka

Dented Peninsula Snail

DD- 115

USA

Helminthoglypta stiversiana

williamsi

 $DD^{-115}$ 

USA

Monadenia fidelis minor

DD 115

USA

Monadenia fidelis pronotis

Rocky Coast Sideband

DD 115

USA

Monadenia mormonum buttoni

DD 115

**USA** 

Monadenia mormonum hirsuta

DD 115

USA

Monadenia yosemitensis

*yosemitensis* 

Indian Yosemite Snail

DD 115

USA

## Family OREOHELICIDAE

Oreohelix idahoensis idahoensis Idaho Banded Mountain Snail

DD 115

USA

Oreohelix strigosa goniogyra

Carinated Striate Banded Mountain

Snail

DD 115

USA

Family ORTHALICIDAE

Placostylus bivaricosus etheridgei

EX 138

Australia

#### Family PARTULIDAE

Partula suturalis

Sutural Partula

EX 115

French Polynesia

Partula suturalis strigosa

EW 115

French Polynesia

Partula suturalis vexillum

EW 115

French Polynesia

Partula taeniata

EX 115

French Polynesia

Partula taeniata elongata

EW 115

French Polynesia

Partula taeniata nucleola

EW 115

French Polynesia

Partula taeniata simulans

EW 115

French Polynesia

#### Family POLYGYRIDAE

Mesodon clarki nantahala

Noonday Snail

DD 115

USA

Mesodon clausus trossulus

Banded Mesodon

DD 115

USA

Stenotrema leai cheatumi

DD 115 USA

#### Family STREPTAXIDAE

Gulella conradti reductidentata

DD 172

Tanzania

Gulella gouldi globulosa

DD 172

Tanzania

Gulella gwendolinae mkusiensis

 $DD^{-172}$ 

Tanzania

Gulella lornae lornae

DD 172

Tanzania

Gulella lornae major DD <sup>172</sup>

Tanzania

Gulella subhyalina addita DD <sup>172</sup>

Tanzania

Gulella usagarica msambaa

DD 172

Tanzania

Gulella usagarica satura

 $DD^{-172}$ 

Tayloria urguessensis subangulata EN <sup>172</sup> B1+2ac

Kenya

Family SUBULINIDAE

Opeas nothapalinus crenatum DD 172

Tanzania

Pseudoglessula leroyi fasciata

DD 172

Tanzania

## List 7

## Taxa removed from the 1996 Red List

Part 1: Taxa listed in 1994, now Lower Risk: least concern

## Class MAMMALIA

## Order DIPROTODONTIA

#### Family PHALANGERIDAE

Phalanger lullulae Woodlark Island Cuscus

Spilocuscus kraemeri Admiralty Cuscus

## Family MACROPODIDAE

Petrogale lateralis
Black-footed Rock-wallaby

#### Order INSECTIVORA

#### Family TENRECIDAE

Geogale aurita Large-eared Tenrec

Microgale brevicaudata
Short-tailed Shrew-tenrec

Microgale longicaudata
Lesser Long-tailed Shrew-tenrec

#### Family CHRYSOCHLORIDAE

Amblysomus iris Zulu Golden Mole

Calcochloris obtusirostris Yellow Golden Mole

#### Family ERINACEIDAE

Atelerix frontalis
South African Hedgehog

#### Family SORICIDAE

Crocidura crenata Crocidura grassei Crocidura lanosa

Crocidura manengubae Crocidura maquassiensis

Makwassie Musk Shrew

Crocidura nimbae

Paracrocidura maxima Sylvisorex ollula

Sylvisorex vulcanorum

#### Order CHIROPTERA

#### Family PTEROPODIDAE

Pteropus anetianus White Flying-fox

#### Order PRIMATES

#### Family LEMURIDAE

Eulemur fulvus albifrons White-fronted Lemur

Eulemur fulvus fulvus Brown Lemur

Eulemur fulvus rufus Red-fronted Lemur

Hapalemur griseus griseus Grey Gentle Lemur

#### Family MEGALADAPIDAE

Lepilemur edwardsi Milne-Edwards' Sportive Lemur Lepilemur leucopus

White-footed Sportive Lemur Lepilemur microdon

Light-necked Sportive Lemur Lepilemur mustelinus

Greater Sportive Lemur Lepilemur ruficaudatus Red-tailed Sportive Lemur

#### Family INDRIDAE

Avahi laniger Woolly Lemur

#### Family GALAGONIDAE

Galagoides thomasi Thomas's Dwarf Galago

#### Family CALLITRICHIDAE

Callithrix intermedia Aripuană Marmoset Callithrix kuhli Wied's Marmoset

Saguinus fuscicollis leucogenys Andean Saddle-back Tamarin

Saguinus tripartitus Golden-mantled Saddle-back Tamarin

#### Family CEBIDAE

Alouatta palliata aequatorialis South Pacific Blackish Howling Monkey

Alouatta pigra Guatemalan Howler

Ateles geoffroyi Geoffroy's Spider Monkey

Ateles paniscus
Black Spider Monkey
Cacajao melanocephalus
Black Uakari

Callicebus torquatus lucifer Widow Monkey

Chiropotes albinasus White-nosed Bearded Saki

Lagothrix lagotricha Common Woolly Monkey

Pithecia aequatorialis Equatorial Saki

#### Order CARNIVORA

#### Family CANIDAE

Canis lupus
Grey Wolf
Dusicyon griseus
Grey Zorro

#### Family FELIDAE

Felis margarita Sand Cat

*Leopardus wiedii* Margay

Oncifelis colocolo Pampas Cat

Otocolobus manul Pallas's Cat

Profelis aurata African Golden Cat

#### Family HYAENIDAE

Hyaena brunnea Brown Hyaena Family OTARIIDAE

Neophoca cinerea Australian Sea Lion

Family PHOCIDAE

Phoca vitulina stejnegeri Western Pacific Harbour Seal

Order CETACEA

Family NEOBALAENIDAE

Caperea marginata Pygmy Right Whale

Family DELPHINIDAE

Delphinus delphis Common Dolphin

Globicephala melas Long-finned Pilot Whale

Lagenorhynchus acutus Atlantic White-sided Dolphin

Lagenorhynchus albirostris White-beaked Dolphin

Lagenorhynchus cruciger Hourglass Dolphin

Lagenorhynchus obliquidens Pacific White-sided Dolphin

Lissodelphis borealis Northern Right Whale Dolphin

Peponocephala electra Melon-headed Whale

Pseudorca crassidens False Killer Whale

Family PHYSETERIDAE

Kogia breviceps Pygmy Sperm Whale

Kogia simus Dwarf Sperm Whale

Order PERISSODACTYLA

Family EQUIDAE

Equus kiang holdereri
Eastern Kiang

Order ARTIODACTYLA

Family BOVIDAE

Rupicapra rupicapra balcanica Balkan Chamois

Order RODENTIA

Family SCIURIDAE

Pteromys momonga Small Japanese Flying-squirrel Family GEOMYIDAE

Thomomys umbrinus emotus Southern Pocket Gopher

Family HETEROMYIDAE

Perognathus inornatus psammophilus
Salinas Pocket Mouse

Family **DIPODIDAE** 

Zapus hudsonius luteus Meadow Jumping Mouse

Family MURIDAE

Aethomys silindensis Selinda Veld Rat

Batomys granti Luzon Forest Rat

Delanymys brooksi Delany's Mouse

Eliurus minor

Gerbillus acticola

Gerbillus muriculus

Gerbillus rosalinda

Heimyscus fumosus

Hylomyscus baeri

Hylomyscus parvus

Malacomys verschureni Microtus breweri

Beach Vole

Peromyscus polionotus niveiventris

Southeastern Beach Mouse
Sigmodon arizonae plenus

Colorado River Cotton Rat
Thamnomys venustus

Wilfredomys oenax

Zelotomys woosnami

Order LAGOMORPHA

Family OCHOTONIDAE

Ochotona alpina nitida Ochotona nubrica

Nubra Pika

Family LEPORIDAE

Lepus othus Alaskan Hare Class AVES

Order FALCONIFORMES

Family ACCIPITRIDAE

Milvus milvus Red Kite

Family FALCONIDAE

Micrastur buckleyi Buckley's Forest-Falcon

Order GRUIFORMES

Family OTIDIDAE

Chlamydotis undulata Houbara Bustard

Order PSITTACIFORMES

Family PSITTACIDAE

Pezoporus wallicus Ground Parrot

Order PASSERIFORMES

Family TYRANNIDAE

Todirostrum senex
Buff-cheeked Tody-Flycatcher

Family CAMPEPHAGIDAE

Coracina schistacea Slaty Cuckooshrike

Coracina sula Sula Cicadabird

Family MUSCICAPIDAE

Amytornis goyderi Eyrean Grasswren Zoothera kibalensis Kibale Ground-Thrush

Family NECTARINIDAE

Nectarinia buettikoferi Apricot-breasted Sunbird

Nectarinia prigoginei

Prigogine's Double-collared Sunbird

Family ZOSTEROPIDAE

Zosterops sanctaecrucis Nendo White-eye

Class REPTILIA

Order CROCODYLIA

Family CROCODYLIDAE

Crocodylus porosus Estuarine Crocodile

#### Order RHYNCHOCEPHALIA

## Family SPHENODONTIDAE

Sphenodon punctatus Cook Strait Tuatara

#### Order SAURIA

## Family GEKKONIDAE

Hoplodactylus chrysosireticus Gold-striped Gecko Hoplodactylus duvauceli Duvaucel's Gecko

Naultinus rudis Rough Gecko

## Family LACERTIDAE

Archaeolacerta monticola Iberian Rock Lizard Lacerta australis Southern Rock Lizard

#### Family SCINCIDAE

Cyclodina oliveri Marbled Skink

Oligosoma notosaurus Southern Skink

## Family VARANIDAE

Varanus flavescens Yellow Monitor

#### Order SERPENTES

Family VIPERIDAE

Vipera raddei Armenian Viper

#### Order TESTUDINES

## Family CHELIDAE

Emydura signata Brisbane Short-necked Turtle

#### Family EMYDIDAE

Mauremys annamensis Annam Leaf Turtle

#### Family TESTUDINIDAE

Gopherus berlandieri Texas Tortoise Testudo marginata

Marginated Tortoise

## Class AMPHIBIA

#### Order ANURA

## Family HYLIDAE

Litoria castanea Yellow-spotted Tree Frog

Litoria dentata Bleating Tree Frog

Litoria lesueuri Lesueur's Frog

Litoria verreauxii Whistling Tree Frog

## Family HYPEROLIIDAE

Afrixalus aureus Golden Dwarf Reed Frog

## Family LEIOPELMATIDAE

Leiopelma hochstetteri Hochstetter's Frog

## Family LEPTODACTYLIDAE

Paratelmatobius gaigeae

#### Family RANIDAE

Rana vertebralis Water Frog

#### Class ACTINOPTERYGII

#### Order CYPRINIFORMES

Family CYPRINIDAE

Chondrostoma willkommii Discherodontus halei

Hemigrammocapoeta kemali

Leuciscus carolitertii

#### Family CATOSTOMIDAE

Moxostoma atripinne Blackfin Sucker

#### Order SILURIFORMES

#### Family MOCHOKIDAE

Chiloglanis swierstrai Lowveld Suckermouth

#### Order SALMONIFORMES

Family SALMONIDAE

Coregonus artedii Cisco

#### Order ATHERINIFORMES

#### Family ATHERINIDAE

Chilatherina axelrodi Axelrod's Rainbowfish

Craterocephalus kailolae Kailola's Hardyhead

Glossolepis maculosus Spotted Rainbowfish

Melanotaenia catherinae Waigeo Rainbowfish

Melanotaenia iris Strickland Rainbowfish

Melanotaenia maylandi Mayland's Rainbowfish

Melanotaenia misoolensis Misool Rainbowfish

Melanotaenia papuae Papuan Rainbowfish

Pseudomugil connieae Popondetta Blue-Eye

Pseudomugil furcatus Forktail Blue-Eye

Pseudomugil majusculus Cape Blue-Eye

Rheocles alaotrensis

Telmatherina bonti

#### Order CYPRINODONTIFORMES

## Family APLOCHEILIDAE

Pachypanchax omalonotus Rivulus marmoratus Rivulus

## Family CYPRINODONTIDAE

Aphanius chantrei Dislisazancik Baligi Cyprinodon atrorus Perrito del Bolson

Cyprinodon bifasciatus Perrito de Cuatro Cienegas

Cyprinodon nazas Cachorrito del Aguanaval

Fundulus lima Killifish

#### Order BELONIFORMES

#### Family **HEMIRAMPHIDAE**

Zenacrhopterus robertsi Robert's River Garfish Order SCORPAENIFORMES

Family COTTIDAE

Myoxocephalus quadricornis Fourhorn Sculpin

Order PERCIFORMES

Family AMBASSIDAE

Ambassis elongatus Yellow-Fin Perchlet

Family TERAPONTIDAE

Pingalla gilberti Gilberts Grunter

Family KUHLIIDAE

Kuhlia marginata Spotted Flagtail

Family TOXOTIDAE

Toxotes oligolepis Big Scale Archerfish

Family CICHLIDAE

Paratilapia polleni

Marakely

Family MUGILIDAE

Myxus capensis Freshwater Mullet

Family ELEOTRIDAE

Hypseleotris aurea Golden Gudgeon

Mogurnda lineata Kokoda Mogurnda

Mogurnda orientalis Eastern Mogurnda

Ratsirakia legendrei

Class CRUSTACEA

Order ANOSTRACA

Family BRANCHINECTIDAE

Branchinecta gigas Giant Fairy Shrimp Order ISOPODA

Family SPHAEROMATIDAE

Thermosphaeroma subequalum

Class INSECTA

Order LEPIDOPTERA

Family NYMPHALIDAE

Euploea configurata Sulawesi Striped Blue Crow

Euploea dentiplaga

Seram Crow

Euploea doretta Pagenstecher's Crow

Euploea eboraci

Bismark Crow

Euploea eupator Sulawesi Pied Crow

Euploea latifasciata Weymer's Crow

Ideopsis klassika

Seram Small Tree-Nymph

Parantica crowleyi Crowley's Tiger

Parantica kirbyi Kirby's Tiger

Parantica menadensis Manado Yellow Tiger

Parantica pumila

Least Tiger

Parantica rotundata

Fat Tiger

Parantica weiskei

Weiske's Tiger

Tirumala gautama Scarce Blue Tiger

Family PAPILIONIDAE

Bhutanitis thaidina Chinese Three-tailed Swallowtail

Ornithoptera paradisea

Paradise Birdwing

Papilio acheron

Danilia tahansi

Papilio toboroi Papilio weymeri

Order ODONATA

Family GOMPHIDAE

Erpetogomphus lampropeltis

Ophiogomphus cecilia

Family LIBELLULIDAE

Leucorrhinia albifrons

Leucorrhinia caudalis

Class **BIVALVIA** 

Order VENEROIDA

Family TRIDACNIDAE

Tridacna crocea Crocus Clam

Class GASTROPODA

Order MESOGASTROPODA

Family CYCLOPHORIDAE

Craspedoma costata

Family HYDROBIIDAE

Bythinella reyniesii

Bythiospeum bressanum

Bythiospeum diaphanum

Graziana lacheineri

Graziana pupula

Moitessieria rolandiana

Moitessieria simoniana

Family POMATIASIDAE

Pomatias raricosta

Order STYLOMMATOPHORA

Family ARIONIDAE

Geomalacus maculosus

Family BULIMULIDAE

Napaeus pygmaeus

Family CAMAENIDAE

Amplirhagada elevata

Prymnbriareus nimberlinus

Setobaudinia collingii

Torresitrachia crawfordi

Family CHAROPIDAE

Semperdon heptaptychius

Family CHONDRINIDAE

Solatopupa guidoni

Family COCHLICOPIDAE

Cochlicopa nitens

Family ENIDAE

'Napaeus' alabastrinus

Family EUCONULIDAE

Ctenophila salaziensis

Family GEOMITRIDAE

Disculella maderensis

Family HELICARIONIDAE

Helicarion australis

Family HELICELLIDAE

Cyrnotheba corsica

Family **HELICIDAE** 

Elona quimperiana

Gittenbergeri turriplana

Hemicycla modesta

Hemicycla plicaria

Trissexodon constrictus

Family PUPILLIDAE

Leiostyla fusca

Leiostyla vincta

Pupilla pupula

Family STREPTAXIDAE

Gonospira funicula

Gulella plantii

Family VERTIGINIDAE

Cylindrovertilla kingi

Family VITRINIDAE

Phenacolimax atlantica

## Part II: Taxa listed in 1994, now Not Evaluated

#### Class MAMMALIA

## Family VESPERTILIONIDAE

Lasiurus cinereus semotus

Hawaiian Hoary Bat Myotis formosus bartelsi

Bartel's Myotis

#### Order PRIMATES

## Family LEMURIDAE

Eulemur fulvus mayottensis

Mayotte Lemur

#### Family CERCOPITHECIDAE

Cercocebus albigena aterrimus

Black Mangabey

Cercocebus torquatus torquatus

Collared Mangabey

Macaca fuscata yakui

Yakushima Macaque

Macaca ochreata brunnescens

Muna-Butung Macaque

Macaca pagensis pagensis

Mentawai Macaque

Macaca tonkeana hecki

Heck's Macaque

Procolobus badius ellioti

Elliot's Red Colobus

Procolobus badius oustaleti

Oustalet's Red Colobus

Procolobus badius tephrosceles

Uganda Red Colobus

Procolobus badius tholloni Thollon's Red Colobus

#### Order CARNIVORA

#### Family MUSTELIDAE

Lutra longicaudis longicaudis

La Plata Ötter

Lutra lutra lutra

European Otter

#### Order ARTIODACTYLA

## Family BOVIDAE

Ammotragus lervia ornatus Egyptian Barbary Sheep

Ovis orientalis orientalis

Red Sheep

#### Order RODENTIA

#### Family SCIURIDAE

Glaucomys volans goldmani

Mexican Flying Squirrel

Glaucomys volans guerreroensis Guerrero Flying Squirrei

Glaucomys volans oaxacensis Oaxaca Flying Squirrel

Ratufa indica dealbata

Dangs Giant Squirrel

Ratufa indica elphinstoni Maharashtra Giant Squirrel

#### Family CASTORIDAE

Castor canadensis frondator

Broad-tail Beaver

Castor canadensis mexicanus

Rio Grande Beaver

Castor fiber birulai

Mongolian Beaver

#### Family MURIDAE

Microtus mexicanus navaho

Microtus pennsylvanicus

chihuahuensis Chihuahua Vole

Reithrodontomys megalotis limicola

Southern Marsh Harvest Mouse

## Order MACROSCELIDEA

#### Family MACROSCELIDIDAE

Petrodromus tetradactylus sangi

Four-toed Elephant-shrew

Rhynchocyon cirnei cirnei

Chequered Elephant-shrew

Rhynchocyon cirnei hendersoni

Henderson's Chequered

Elephant-shrew

Class AVES

#### Order STRIGIFORMES

Family STRIGIDAE

Otus magicus albiventris

Flores Scops-Owl

Otus spilocephalus stresemanni Sumatran Scops-Owl

#### Order CORACIIFORMES

Family ALCEDINIDAE

Todirhamphus cinnamominus miyakoensis Ryukyu Kingfisher

#### Order PASSERIFORMES

Family COTINGIDAE

Laniisoma elegans elegans Shrike-like Cotinga

#### Class REPTILIA

Order SAURIA

Family ANIELLIDAE

Anniella pulchra nigra Black Legless Lizard

#### Family IGUANIDAE

Phrynosoma coronatum blainvillei San Diego Horned Lizard

#### Family LACERTIDAE

Podarcis filfolensis filfolensis Filfola Lizard

#### Family SCINCIDAE

Eulamprus tympanum ssp. Dreeite Water Skink

Gongylomorphus bojerii fontenayi Macabe Forest Skink

#### Family VARANIDAE

Varanus griseus caspius Central Asian Desert Monitor

#### Order SERPENTES

Family BOIDAE

Charina bottae umbratica Rubber Boa

Epicrates striatus fosteri Bahamas Boa

## Family COLUBRIDAE

Drymarchon corais couperi
Eastern Indigo Snake
Masticophis flagellum ruddocki
San Joaquin Coachwhip
Masticophis lateralis euryxanthus
Almeda Striped Racer

Nerodia fasciata taeniata Atlantic Saltmarsh Snake

Nerodia harteri paucimaculata Concho Water Snake

Nerodia sipedon insularum Lake Erie Water Snake

Thamnophis sirtalis tetrataenia San Francisco Garter Snake

#### Family VIPERIDAE

Crotalus willardi obscurus New Mexican Ridge-nosed Rattlesnake

Vipera ammodytes transcaucasiana Transcaucasian Long-nosed Viper

#### Order TESTUDINES

#### Family EMYDIDAE

Trachemys scripta callirostris Colombian Slider

Trachemys stejnegeri malonei Inagua Island Turtle

Trachemys terrapen felis
Cat Island Freshwater Turtle

#### Family TESTUDINIDAE

Testudo graeca graeca Spur-thighed Tortoise

Testudo hermanni boettgeri Eastern Hermann's Tortoise

#### Class AMPHIBIA

#### Order ANURA

Family **DISCOGLOSSIDAE** Discoglossus jeanneae

#### Family HYLIDAE

Pseudacris streckeri illinoensis Illinois Chorus Frog

#### Order CAUDATA

#### Family AMBYSTOMATIDAE

Ambystoma dumerilii dumerilii Lake Patzcuaro Salamander

Ambystoma macrodactylum croceum
Santa Cruz Long-toed Salamander

## Class CEPHALASPIDOMORPHI

## Order PETROMYZONTIFORMES

Family PETROMYZONTIDAE

Lampetra tridentata ssp. Pacific Lamprey

## Class ACTINOPTERYGII

#### Order CYPRINIFORMES

## Family CYPRINIDAE

Cyprinella sp. Sardinita Nazas

Dionda episcopa ssp. Roundnose Minnow

Gila bicolor ssp. Tui Chub

Gila rabusta ssp. Roundtail Chub

Lepidomeda mollispinis ssp. Virgin Spinedace

*Pseudorasbora pumila* ssp. Ushimotsugo

Rhinichthys cataractae ssp. Longnose Dace

Rhinichthys osculus ssp. Speckled Dace

#### Family CATOSTOMIDAE

Catostomus sp. Salish Sucker

Catostomus catostomus lacustris Jasper Longnose Sucker

Catostomus clarki intermedius White River Sucker

Catostomus dicobolus yarrowi Zuni Bluehead Sucker

Catostomus occidentalis lacusanserinus Goose Lake Sucker

Catostomus rimiculus ssp. Jenny Creek Sucker

Chasmistes liorus liorus June Sucker

Chasmistes liorus mictus June Sucker

Moxostoma sp. Bighead Redhorse

#### Order SILURIFORMES

Family ICTALURIDAE

Ictalurus sp. Bagre de Cuatro Cienegas

Family BAGRIDAE

Pseudobagrus sp. Gibachi

## Family PLOTOSIDAE

Neosilurus sp. 1 Dalhousie Catfish

Neosilurus sp. 2 Cooper Creek Tandan

Neosilurus sp. 3 False Spine Catfish

Tandanus sp.
Belinger River Tandan

#### Order SALMONIFORMES

#### Family SALMONIDAE

Coregonus sp. 1 Opeongo Whitefish

Coregonus sp. 2 Squanga Whitefish

Oncorhynchus sp. Trucha de Yaqui

Oncorhynchus clarki ssp. Cutthroat Trout

#### Order OPHIDIIFORMES

#### Family BYTHITIDAE

*Typhliasina* sp. Nueva Dama Ciega

#### Order CYPRINODONTIFORMES

## Family CYPRINODONTIDAE

Cyprinodon eximius ssp. Conchos Pupfish

Cyprinodon macularius ssp. Desert Pupfish

Cyprinodon nevadensis ssp. Amargosa Pupfish

Cyprinodon salinus milleri Cottonball Marsh Pupfish

Cyprinodon salinus salinus Salt Creek Pupfish

#### Family GOODEIDAE

Empetrichthys latos concavus Raycraft Ranch Poolfish

Empetrichthys latos latos Pahrump Poolfish Empetrichthys latos pahrump Pahrump Ranch Poolfish

## Order GASTEROSTEIFORMES

#### Family GASTEROSTEIDAE

Gasterosteus sp. 1 Giant Stickleback

Gasterostcus sp. 2 Enos Stickleback

Gasterosteus aculeatus santaeannae Santa Ana Stickleback

Gasterosteus aculeatus williamsoni Unarmored Threespine Stickleback

Pungitius sp. Musashitomiyo

#### Order PERCIFORMES

#### Family TERAPONTIDAE

Scortum sp. Angalarri Grunter

#### Family CENTRARCHIDAE

Lepomis megalotis ssp.
Mojarra de Cuatro Cienegas
Micropterus salmoides ssp.
Robalo de Cuatro Cienegas

## Family ELASSOMATIDAE

Elassoma sp. Spring Pygmy Sunfish

#### Family PERCIDAE

Etheostoma sp.
Dardo de Cuatro Cienegas

#### Family CICHLIDAE

Oreochromis alcalicus grahami Lake Magadi Tilapia

#### Family EMBIOTOCIDAE

Hysterocarpus traski pomo Russian River Tule Perch

#### Family ELEOTRIDAE

Mogurnda sp. 1 False-Spotted Gudgeon Mogurnda sp. 2 Flinders Ranges Gudgeon

Mogurnda sp. 3 Karamui Gudgeon Mogurnda sp. 4

Wau Gudgeon

Mogurnda sp. 5
Highlands Gudgeon

Mogurnda sp. 6 Malas Gudgeon

Mogurnda adspersa Purple Spotted Gudgeon

#### Family GOBIIDAE

Glossogobius sp. 1 Mountain Goby

Glossogobius sp. 2 Irian Goby

Glossogobius sp. 3 Robert's Goby

Glossogobius sp. 4 Bluntsnout Goby Glossogobius sp. 5

Sentani Goby

Glossogobius sp. 6 Fly River Goby

Glossogobius sp. 7 Kutubu Goby

Glossogobius sp. 8 Bighead Goby

Glossogobius sp. 9 Ramu Goby

Glossogobius sp. 10 Mulgrave Goby

Pseudogobiopsis sp. Red-spotted Goby

#### Class CRUSTACEA

#### Order ANASPIDACEA

Family ANASPIDIDAE

Anaspides sp. Syncarid Shrimps

#### Order ISOPODA

# Family PHREATOICIDAE Mesacanthotelson setosis

Family STYLONISCIDAE

Styloniscus sp. 1

#### Class INSECTA

#### Order BLATTARIA

## Family BLATTIDAE

Aspiduchus cavernicola Tuna Cave Roach

#### Order COLEOPTERA

Family ANOBIIDAE

Holcobius pikoensis Piko Anobiid Beetle

#### Family ANTHICIDAE

Anthicus antiochensis Antioch Dunes Beetle

#### Family CARABIDAE

Agonum belleri Beller's Ground Beetle

Aplothorax burchelli

Mormolyce phyllodes Ghost Walker Beetle

Rhadine persephone Tooth Cave Ground Beetle

Sphaeroderus schaumi shenandoah Schaum's Blue Ridge Ground Beetle

#### Family CERAMBYCIDAE

Aeschrithmysus dubautianus

Aeschrithmysus swezeyi

Aeschrithmysus terryi

Crossidius mojavensis mojavensis Mojave Rabbitbrush Longhorn Beetle

Desmocerus californicus dimorphus Valley Elderberry Longhorn Beetle

Dryobius sexnotatus

Six-banded Longhorn Beetle

Necydalis rudei

Rude's Longhorn Beetle

Nesithmysus bridwelli

Nesithmysus frobesi

Nesithmysus haasi

Nesithmysus swezeyi

#### Family CHRYSOMELIDAE

Donacia idola Bog Idol Leaf Beetle

## Family CICINDELIDAE

Cicindela arenicola Idaho Dunes Tiger Beetle

Cicindela cazieri

Cazier's Tiger Beetle

Cicindela chlorocephala smythi

Smyth's Tiger Beetle

Cicindela dorsalis dorsalis

North-eastern Beach Tiger Beetle

Cicindela latesignata obliviosa Oblivious Tiger Beetle

Cicindela limbota albissima

Coral Pink Dunes Tiger Beetle

Cicindela marginata Tiger Beetle

Cicindela nevadica olmosa

Los Olmos Tiger Beetle

Cicindela nigrocoerula subtropica Subtropical Blue-Black Tiger Beetle

Cicindela obsoleta neojuvenalis Neojuvenile Tiger Beetle

Cicindela tranquebarica viridissima Greenest Tiger Beetle

## Family CURCULIONIDAE

Anagotus fairburni Flax Weevil

Anagotus stephenensis Stephen's Island Weevil

Anagotus turbotti Turbott's Weevil

Deinocossonus nesiotes

Oahu Nesiotes Weevil Dysticheus rotundicollis

Antioch Dune Weevil

Hadramphus spinipennis

Coxella Weevil

Hadramphus stilbocarpae Knobbled Weevil

Heteramphus filicum

Heterexis seticostatus

Karocolens pittospori

Lyperobius huttoni Wellington Speargrass Weevil

Megacolabus sculpturatus

Microcryptorhynchus orientissimus

Miloderes nelsoni

Nelson's Weevil

Miloderes rulieni Rulien's Weevil

Nesotocus giffordi

Gifford's Weevil Nesotocus kauaiensis

Kanai Weevil

Nesotocus munroi

Munro's Weevil

Nothaldonis peaci

Oclandius laeviusculus

Onchobarus langei

Lange's El Segundo Dune Weevil

Pentarthrum obscura Obscure Weevil

Pentarthrum pritchardias

Rhyncogonus hendersoni

Stenotrupis pritchardiae

Nihoa Weevil

Trigonoscuta brunnotesselata

Brown-tassel Weevil

Trigonoscuta dorothea dorothea

Dorothy's El Segundo Dune Weevil

Trigonoscuta doyeni Doyen's Dune Weevil

Unas piceus

## Family DYTISCIDAE

Agabus rumppi

Death Valley Agabus Diving Beetle

Aglymbus bimaculatus

Aglymbus bromeliarum

Colymbetes piceus

Deronectes costipennis

Deronectes wewalkai

Desmopachria conchramis

Fig Seed Diving Beetle

Dytiscus lapponicus disjunctus

Haideoporus texanus

Texas Cave Beetle Hydaticus decorus

Hydaticus okalehubyi

Hydroporus elusivus Elusive Diving Beetle

Hydroporus folkertsi

Folkert's Diving Beetle

Hydroporus hirsutus Woolly Diving Beetle

Hydroporus humilis

Hydroporus leechi

Leech's Skyline Diving Beetle

Hydroporus mariannae

Hydroporus oasis Hydroporus productus

Hydroporus spangleri Spangler's Diving Beetle

Hydroporus sulphurius Sulphur Springs Diving Beetle

Hydroporus utahensis Utah Diving Beetle

Hygrotus curvipes

Curved-foot Diving Beetle

Hygrotus diversipes

Narrow-foot Diving Beetle

Hygrotus fontinalis Travertine Band-thigh Diving Beetle

Hygrotus sylvanus

Sylvan Diving Beetle Hyphydrus doni

Lacconectus birmanicus

Lacconectus corayi

Lacconectus heinertzi

Lacconectus javanicus

Lacconectus laccophiloides Lacconectus minutus Lacconectus muluensis Lacconectus oceanicus Lacconectus pulcher Lacconectus punctatus Lacconectus punctipennis Lacconectus ritsemae Lacconectus sabahensis Platynectes buruensis Platynectes decastigma Pleurodytes dineutoides Potamonectes canariensis Potamonectes cazorlensis Potamonectes insignis Potamonectes lanceolatus Potamonectes walkeri Rhantus crypticus Rhantus limbatus Sandracottus baeri Sandracottus bizonatus Sandracottus chevrolati Sandracottus maculatus

## Family ELATERIDAE

Sandracottus rotundatus

Amychus candezei Chatham Island Amychus Amychus granulatus Cook Strait Amychus Eanus hatchi

#### Family ELMINTHIDAE

Atractelmis wawana Wawawona Riffle Beetle

Cylloepus parkeri Parker's Riffle Beetle

Dubiraphia brunnescens Brownish Riffle Beetle

Dubiraphia giulianii Giuliani's Riffle Beetle

Dubiraphia parva Little Riffle Beetle

Dubiraphia robusta Robust Riffle Beetle

Heterelmis stephani Stephan's Riffle Beetle

Huleechius marroni carolus Marron's San Carlos Riffle Beetle

Microcylloepus browni Brown's Riffle Beetle Optioservus browni Brown's Riffle Beetle

Optioservus canus Pinnacles Riffle Beetle

Optioservus phaeus Scott Riffle Beetle

Stenelmis calida calida Devil's Hole Warm Spring Riffle Beetle

Stenelmis calida moapa Moapa Warm Springs Riffle Beetle Stenelmis douglasensis Douglas Riffle Beetle Zaitzeva thermae Warm Spring Riffle Beetle

#### Family EUCNEMIDAE

Paleoxenus dohmi Dohm's Elegant Eucnemid Beetle

# Family GEOTRUPIDAE Typhaeus hiostius

7.

Family GYRINIDAE

Spanglerogyrus albiventris
Red Hills Unique Whirligig Beetle

#### Family HALIPLIDAE

Brychius hungerfordi Hungerford's Crawling Water Beetle Haliplus nitens Disjunct Crawling Water Beetle

#### Family HYDRAENIDAE

Gymnochthebius maureenae Maureen's Minute Moss Beetle

Hydraena moureenae Maureen's Moss Beetle

Limnebius aridus Animas Minute Moss Beetle

Limnebius texanus Texas Minute Moss Beetle

Limnebius utahensis
Utah Minute Moss Beetle

Ochthebius crassalus

Wing-shoulder Minute Moss Beetle Ochthebius putnamensis

Indiana Minute Moss Beetle

Ochthebius recticulus

Wilbur Springs Minute Moss Beetle

#### Family HYDROPHILIDAE

Chaetarthria leechi Leech's Water Scavenger Beetle Chaetarthria utahensis
Utah Water Scavenger Beetle
Cymbiodyta arizonica
Arizona Water Scavenger Beetle
Hydrochara rickseckeri
Ricksecker's Water Scavenger Beetle
Paracymus seclusus
Seclusive Water Scavenger Beetle

#### Family LAMPYRIDAE

Micronaspis floridana
Florida Intertidal Firefly
Photuris brunnipennis floridana
Everglades Browing Firefly

#### Family LUCANIDAE

Apterocychus honoluluensis Kauai Flightless Stag Beetle Dorcus auriculatus Dorcus ithaginis

#### Family MELOIDAE

Lytta hoppingi
Hopping's Blister Beetle
Lytta inseperata
Mojave Desert Blister Beetle
Lytta mirifica
Anthony Blister Beetle
Lytta moesta
Moestan Blister Beetle

Lytta molesta Molestan Blister Beetle Lytta morrisoni Morrison's Blister Beetle

#### Family **PSEPHENIDAE**

Acneus beeri Beer's False Water Penny Bectle

Acneus burnelli Burnell's False Water Penny Beetle

Alabamaubria starki Stark's False Water Penny Beetle

Dicranopselaphus variegatus Variegated False Water Penny Beetle

Psephenus arizonensis Arizona Water Penny Beetle

Psephenus montanus White Mountains Water Penny Beetle

## Family SCARABAEIDAE

Aegialia haroyi Hardy's Scarab Beetle Aegialia magnifica Large Scarab Beetle Anomala exigua Exiguous Scarab Beetle

Anomala eximia Archbold Scarab Beetle

Anomala tibialis
Tibial Scarab Beetle

Aphodius fordi Ford's Beetle

Aphodius troglodytes
Tortoise Commensal Scarab Beetle

Ataenius superficialis Big Pine Key Dung Beetle

Ataenius woodruffi Woodruff's Dung Beetle

Copris gopheri Tortoise Commensal Scarab Beetle

Cyclocephala miamiensis Miami Roundhead Scarab Beetle

Dynastes hercules glaseri Dynastes hercules hercules

Hercules Beetle

Dynastes hercules reidi Hercules Beetle

Glaresis arenata Kelso Dune Scarab Beetle

Gronocarus multispinosus Spiny Florida Sandhill Scarab Beetle

Lichnanthe albopilosa

White Sand Bear Scarab Beetle Lichnanthe ursina

Pacific Sand Bear Scarab Beetle Mycotrupes pedester

Scrub Island Burrowing Scarab Beetle

Onthophagus polyphemi Tortoise Commensal Scarab Beetle

Oryctes chevrolati
Peltotrupes youngi
Ocala Burrowing Scarab Beetle

Polylamina pubescens Woody Gulf Dune Scarab Beetle

Polyphylla anteronivea Saline Valley Snow-front Scarab

Polyphylla avittata Spotted Warner Valley Dunes Scarab

Polyphylla barbata
Barbate Scarab Beetle

Polyphylla nubila Atascodera Scarab Beetle

Serica frosti Frost's Spring Scarab Beetle

Serica tantula
Tantula Scarab Beetle

Trigonopelastes floridana Scrub Palmetto Flower Scarab Beetle Family TROGIDAE

Trox howelli Caracara Commensal Scarab Beetle

Order COLLEMBOLA

Family NEANURIDAE

Acanthanura dendyi

Acanthanura sp.

Megalanura tasmaniae Womersleymeria bicornis

Womersleymeria sp.1 Womersleymeria sp.2

Order DIPTERA

Family ACROCERIDAE

Eulonchus marialiciae Mary Alice's Small-headed Fly

Family APIOCERIDAE

Raphiomydas triochilus Valley Mydas Fly

Family ASILIDAE

Cophura hurdi Antioch Robberfly

Efferia antiochi
Antioch Robberfly

Metapogon hurdi Hurd's Robberfly

Family ASTEIIDAE

Bryania bipunctata Nihoa Two-spotted Asterid Fly

Family EMPIDIDAE

Chersodromia hawaiiensis Hawaiian Dance Fly

Family EPHYDRIDAE

Paracoenia calida Wilber Springs Shore Fly

Family MYCETOPHILIDAE

Arachnocampa tasmaniensis

Family SYRPHIDAE

Mixogaster delongi Delong's Flower Fly

Family TABANIDAE

Apatalestea rossi Ross's Apatalestes Tabanid Fly Asaphomyia floridensis Florida Asaphomyian Tabanid Fly Asaphomyia texanus Texas Asaphomyian Tabanid Fly Merycomyia brunnea Brown Merycomyian Tabanid Fly

Order EPHEMEROPTERA

Family BAETIDAE

Heterocleon berneri Berner's Two-winged Mayfly

Family BEHNINGIIDAE

Dolania americana American Sand-burrowing Mayfly

Family CAENIDAE

Brachycercus flavus Yellow Mayfly

Family EPHEMERELLIDAE

Ceratella frisoni Frison's Mayfly

Ceratella spiculosa Spicluose Mayfly

Ephemerella argo Argo Mayfly

Family EPHEMERIDAE

Ephemera compar Colorado Burrowing Mayfly

Ephemera triplex

West Virginia Burrowing Mayfly

Family HEPTAGENIIDAE

Pseudirion meridionalis Meridion Blackwater Mayfly

Family OLIGONEURIIDAE

Homoeoneuria cahabensis Cahaba Sand-filtering Mayfly

Homoeoneuria dolani Blackwater Sand-filtering Mayfly

Family SIPHLONURIDAE

Ameletus falsus
False Mayfly
Isonychia diversa
Diverse Mayfly

Order HEMIPTERA

Family BELOSTOMATIDAE

Belostoma saratogae Saratoga Springs Bug

#### Family LYGAEIDAE

Metrarga obscura Mauna Loa Seed Bug

Neseis alternatus Kanai Band-legged Seed Bug

Neseis haleakalae Mount Haleakala Seed Bug

Nesocryptias villosa Villosan Flightless Seed Bug

Nysius frigatensis
French Frigate Shoal Seed Bug

Nysius neckerensis Necker Goosefoot Seed Bug

Nysius nihoae Nihoae Seed Bug Nysius sulfusus

Necker Bunchgrass Seed Bug

Oceanides bryani Bryan's Seed Bug

Oceanides perkensi Perkin's Oceanides Seed Bug

Oceanides rugosiceps Rough-headed Seed Bug

#### Family MACROVELIIDAE

Oravelia pege Dry Creek Cliff Strider Bug

#### Family MESOVELIIDAE

Cavaticovelia aaa Aaa Water Treader-Bug

#### Family MIRIDAE

Cyrtopeltis phyllostegiae Mirid Leaf Bug

Kalania hawaiiensis Lanai Leaf Bug

#### Family NAUCORIDAE

Ambrysus amargosus Ash Meadows Bug

Pelocoris shoshone Amargosa Bug

## Family REDUVIIDAE

Empicoris pulchrus Pulchrus Thread Bug

Nesidiolestes ana
Ana Wingless Thread Bug

Nesidiolestes insularis Mount Tantalus Wingless Thread Bug

Nesidiolestes roberti Robert's Wingless Thread Bug Nesidiolestes selium Selium Wingless Thread Bug Siacella smithi Smith's Reduviid Bug

#### Family RHOPALIDAE

Ithamar annectans
Annectans Bug
Ithamar hawaiiensis
Hawaiian Bug

#### Order HOMOPTERA

Family **APHIDIDAE**Ceriferella leucopogonis

#### Family CICADELLIDAE

Felexamia rubranura Red-veined Prairie Leafhopper

#### Family CICADIDAE

Maoricicada myersi Myers' Cicada

#### Family CIXIIDAE

Oliarus consimilis
Kauai Parti-coloured Planthopper
Oliarus discrepans
Wild Cotton Planthopper
Oliarus lanaiensis
Lanai Planthopper
Oliarus lihue
Lihue Planthopper
Oliarus myoporicola
Barber's Point Planthopper

## Family DELPHACIDAE

Nesorestias filicicola Mt Tantalus Shortwing Fern Planthopper

Nesosydne acuta Iao Valley Planthopper Nesosydne bridwelli

Bridewell's Planthopper

Nesosydne cyrtandrae Nahiku Planthopper

Nesosydne cyrtandricola Glenwood Planthopper

Nesosydne kuschei Kusche's Planthopper

Nesosydne leahi Diamond Head Planthopper

Nesosydne longipes Long-footed Planthopper Nesosydne sulcata Keanae Planthopper

## Family TETTIGARCTIDAE

Tettigarcta tormentosa

#### Order HYMENOPTERA

#### Family ANDRENIDAE

Perdita hirticeps luteocincta Yellow Banded Andrenid Bee Perdita scitula antiochensis Antioch Andrenid Bee

## Family BETHYLIDAE

Sclerodermus nihoaensis Nihoa Sclerodermus Wasp

#### Family EUPELMIDAE

Eupelmus nihoaensis Nihoa Eupelmus Wasp

## Family MUTILLIDAE

Myrmosula pacifica Antioch Mutillid Wasp

#### Family SPHECIDAE

Deinomimesa hawaiiensis Hawaiian Sphecid Wasp

Deinomimesa punae Puna Sphecid Wasp

Ectemnius curtipes
Short-foot Sphecid Wasp

Ectemnius fulvicrus
Brown Cross Sphecid Wasp

Ectemnius giffardi Giffard's Sphecid Wasp

Ectemnius haleakalae Haleakala Sphecid Wasp

Ectemnius nesocrabo bidecoratus Bidecoratus Sphecid Wasp

Eucerceris ruficeps Redheaded Sphecid Wasp

Nesomimesa kauaiensis Kauai Sphecid Wasp

Nesomimesa perkins

Nesomimesa sciopteryx Shade-winged Sphecid Wasp

Philanthus nasalis
Antioch Sphecid Wasp

## Family VESPIDAE

Odynerus niihauensis Niihau Vespid Wasp Odynerus soror

Soror Vespid Wasp

Order LEPIDOPTERA

Family ACRAEIDAE

Acraea hova

Acraea sambavae

Family CARPOSINIDAE

Heterocrossa viridis Green Carposinid Moth

Family COCHYLIDAE

Carolella busckana Busk's Gall Moth

Family GELECHIIDAE

Kiwaia jeanae

Family GEOMETRIDAE

Acalyphes philorites

Dirce aesiodora

Dirce lunaris

Dirce oriplancta

Dirce solaris

Fletcherana ioxantha

Ioxantha Looper Moth

Family GRACILLARIIDAE

Petrochroa neckerensis

Necker Leaf-miner Moth Phildoria wilkesiella

Family HEPIALIDAE

Leto venus

Silver Spotted Ghost Moth

Zelotypia stacyi

Bent Wing Swift Moth

Family HESPERIIDAE

Antipodia chaostola leucophaea

Epargyreus antaeus

Epargyreus spana

Euscheman rafflesia

Hesperia leonard montana

Pawnee Montane Skipper

Hesperilla mastersi marakupa

Kedestes barerae bunta

Barber's Ranger

Kedestes chaca

Metisella syrinx

Bamboo Sylph

Oreisplanus munionga larana

Panoquina panoquinoides errans

Salt Marsh Skipper

Problema bulenta

Rare Skipper

Pseudocopaeodes eunus eunus

Wandering Skipper

Syrichtus cribrellum

Spinose Skipper

Syrichtus tessellum

Tessellated Skipper

Tsitana dicksoni

Dickson's Sylph

Family LYCAENIDAE

Aloeides dentatis dentatis

Aloeides dentatis maseruna

Aloeides trimeni southeyae

Argyrocupha malagrida

cedrusmontana

Lion's Head Copper

Argyrocupha malagrida malagrida

Lion's Head Copper

Argyrocupha malagrida maryae

Lion's Head Copper

Argyrocupha malagrida paarlensis

Lion's Head Copper

Bowkeria phosphor borealis

Bowkeria phosphor phosphor

Callophrys mossii bayensis

San Bruno Elfin

Cyclyrius mandersi

Durbania amakosa albescens

Durbania amakosa flavida

Euphilotes battoides comstocki

Comstock's Blue

Euphilotes bernardino allyni

El Segundo Blue

Euphilotes enoptes smithi

Smith's Blue

Euphilotes rita mattonii

Mattoni's Blue

Everes comyntas texanus

Texas Tailed Blue Glaucopsyche lygdamus

palosverdesensis

Palos Verdes Blue

Hemiargus thomasi bethune-bakeri

Miami Blue Butterfly

Icaricia icarioides missionensis

Mission Blue

Icaricia icarioides moroensis

Moro Bay Blue

Icaricia icarioides pheres

Pheres Blue

Iolaus diametra natalica

Lepidochrysops jamesi classensi

Lepidochrysops jamesi jamesi

Lepidochrysops methymna dicksoni

Lepidochrysops oreas oreas

Lycaeides argyrognomon lotis Lotis Blue

Lycaeides melissa samuelis

Karner Blue

Lycaena dorcas claytoni Clayton's Copper

Maculinea teleius burdigalensis

Scarce Large Blue

Mitoura gryneus sweadneri Sweadner's Hairstreak

Notarthrinus binghami

Oreolyce dohertyi

Naga Hedge Blue

Ornipholidotos peucetia penningtoni

White Mimic

Panchala ganesa loomisi

Tailless Blue

Phasis thero cedarbergae

Philotiella speciosa bohartorum

Bohart's Blue

Plebejus emigdionis

San Emigdio Blue

Plebejus icarioides missionensis

Mission Blue

Poecilmitis brooksi tearei

Poecilmitis nigricans nigricans

Blue Jewel Copper

Poecilmitis nigricans zwartbergae

Blue Jewel Copper

Poecilmitis pyroeis hersaleki

Pseudalmenus chlorinda chlorinda

Pseudalmenus chlorinda conara Shijimiaeoides langstoni langstoni

Langston's Blue

Spindasis collinsi

Strymon acis bartrami

Bartram's Hairstreak

Styx infernalis

Thestor dicksoni calviniae

Dickson's Thestor

Thestor dicksoni dicksoni

Dickson's Thestor

Thestor montanus pictus

Tuxentius melaena griqua

Uranothauma usambarae

Family MEGATHYMIDAE

Stallingsia maculosus

Manfreda Giant Skipper

#### Family NOCTUIDAE

Catocala marmorata Marbled Underwing Moth

Catocala pretiosa
Precious Underwing Moth

Erythroecia hebardi Hebard's Noctuid Moth

Lithophane lemmeri Lemmer's Noctuid Moth

Pyreferra ceromatica Ceromatic Noctuid Moth

# Family NYMPHALIDAE

Anaea floridalis Florida Leafwing

Antanartia borbonica

Antanartia borbonica mauritiana

Apaturopsis kilusa

Apaturopsis pauliani Charaxes cowani

Charaxes druceanus entabeni Silver Barred Charaxes

Charaxes druceanus williamsi

Charaxes durnfordi nicholi

Chestnut Rajah

Charaxes karkloof capensis

Charaxes marieps

Charaxes usambarae

Charaxes xiphares desmondi

Charaxes xiphares xiphares Western Forest Emperor

Cymothoe alcimeda alcimeda

**Battling Glider** 

Cymothoe amaniensis

Cymothoe aurivillii

Cymothoe magambae

Cymothoe melanjae

Cymothoe teita

Doleschallia bisaltide andamana Andaman Leafwing

Euphydryas editha bayensis

Bay Checkerspot Butterfly

Euphydryas editha monoensis Mono Checkerspot Butterfly

Euryphura achlys Mottled Green

Euthalia malapana

Euxanthe madagascariensis

Fabriciana elisa

Corsican Fritillary

Heliconius charitonius peruvianus Heteronympha cordacea comptena Hypolimnas antevorta

Hypolimnas dubius drucei

Neptis manasa

Pale Hockeystick Sailer

Phalanta philiberti

Neptis nycteas

Neptis sankara nar

Phyciodes batesi

Tawny Crescent Butterfly

Salamis angustina Salamis Retrecie

C.1 .

Salamis angustina angustina

Salamis Retrecie

Salamis angustina vinsoni

Sasakia charonda

Satyrodes eurydice fumosa

Smokey Eyed Brown Butterfly

Smerina manoro

Speyeria adiaste atossa

Atossa

Speyeria callippe callippe

Callippe Silverspot

Speyeria hydaspe conquista

Silverspot

Speyeria idalia Regal Fritillary

Speyeria nokomis caerulescens

Blue Silverspot

Speyeria nokomis nokomis

Great Basin Silverspot

Speyeria zerene behrensii Behren's Silverspot

Speyeria zerene hippolyta Oregon Silverspot

Speyeria zerene myrtleae Myrtle's Fritillary

#### Family PAPILIONIDAE

Eurytides lysithous harrisianus Harris' Mimic Swallowtail

Graphium alebion chungianus

Graphium antiphates ceylonicus Sri Lankan Five-bar Swordtail

Papilio aristodemus ponceanus Schaus' Swallowtail

Papilio desmondi teita Taita Blue-banded Papilio

Papilio phorbanta nana

Parnassius apollo vinningensis

Parnassius clodius shepardii Shepard's Clodius Parnassian

Parnassius clodius strohbeeni Strohbeen's Clodius Parnassian Troides aeacus kaguya

## Family PIERIDAE

Artogeia virginiensis West Virginia White

Belenois orgygia

Euchloe hyantis andrewsi Andrew's Marble Butterfly

Mylothris carcassoni

Pieris krueperi devta

## Family PYRALIDAE

Kupea electilis

Margaronia cyanomichla

Blue Margaronian

Margaronia exaula

Green Margaronian

Oeoblia dryadopa

Ohenaupaka Oeobian Moth

## Family RIODINIDAE

Apodemia mormo langei Lange's Metalmark

## Family SATYRIDAE

Cercyonis sthenele sthenele Sthenele Wood Nymph

Erebia annada annada

Erebia gorgone

Gavarnie Ringlet

Erebia narasingha narasingha

Erebia ottomana

Ottoman Brassy Ringlet

Erebia scipio

Larche Ringlet

Erebia sthennyo

False Dewy Ringlet Erebia sudetica

Sudeten Ringlet

Lethe distans

Scarce Red Forester

Lethe dura gammiei

Lethe europa tamuna

Lethe gemina gafuri

Lethe margaritae

Lethe ocellata lyncus

Lethe ramadeva

Lethe satyavati

Neonympha mitchelli mitchelli Mitchell's Satyr Butterfly

Pararge menava maeroides

Stygionympha dicksoni

Dickson's Brown

Ypthima dohertyi persimilis

Family SESIIDAE

Synanthedon castaneae Chestnut Clearwing Moth

Family SPHINGIDAE

Celerio wilsoni perkinsi

Euproserpinus euterpe Kem Primrose Sphinx Moth

Manduca blackburni Blackburn's Sphinx Moth

Family TORTRICIDAE

Grapholitha edwardsiana San Francisco Tree Lupine

Spheterista oheoheana Ohe Ohe Leaf-roller Moth

Spheterista pterotropiana Green-Banded Ohe Ohe Leaf-roller Moth

Spheterista reynoldsiana Wallupe Leaf-Roller Moth

Order MECOPTERA

Family APTEROPANORPIDAE

Apteropanorpa tasmanica

Order NEUROPTERA

Family HEMEROBIIDAE

Nesothauma halakalae Haleakala Spongillafly

Pseudopsectra cookeorum

Cooke's Spongillafly Pseudopsectra lobipennis

Lobe-wing Spongillafly Pseudopsectra swezeyi

Swezey's Spongillafly

Pseudopsectra usingeri Usinger's Spongillafly

Family ITHONIDAE

Oliarces clara

Family MYRMELEONTIDAE

Eidoleon perjurus Molokai Antlion

Order ORTHOPTERA

Family ACRIDIDAE

Podismopsis transsylvanica

Family RHAPHIDOPHORIDAE

Pristoceuthophilus sp. Samwell Cave Cricket

Family STENOPELMATIDAE

Deinacrida sp. Mahoenui Giant Weta

Deinacrida carinata

Herekopare Island Weta

Deinacrida tibiospina Nelson Alpine Weta

Hemiandrus sp. Tusked Weta

Hemidaina ricta

Banks Peninsula Weta

Order PLECOPTERA

Family CAPNIIDAE

Capnia lacustra

Lake Tahoe Benthic Stonefly

Family EUSTHENIIDAE

Eusthenia reticulata

Family LEUCTRIDAE

Leuctra szczytkoi Schoolhouse Springs Stonefly

Family NEMOURIDAE

Lednia tumana Meltwater Stonefly

Nemours wahkeena Wahkeena Falls Flightless Stonefly

Family NOTONEMOURIDAE

Kimminsoperla biloba

Kimminsoperla williamsi

Family PELTOPERLIDAE

Soliperla fenderi

Fender's Stonefly

Family PERLIDAE

Beloneuria georgiana Georgia Stonefly

Beloneuria jamesae Cheaha Stonefly

Hansonoperla appalachia Hanson's Appalachian Stonefly

Family TAENIOPTERYGIDAE

Taeniopteryx starki

Leon River Stonefly

Order THYSANURA

Family MACHILIDAE

Machiloides heteropus Hawaiian Long-palp Bristletail

Machiloides perkinsi Perkin's Club-palp Bristletail

Order TRICHOPTERA

Family GLOSSOSOMATIDAE

Agapetus artesus

Artesian Caddisfly

Agapetus denningi Denning's Caddisfly

Agapetus medicus

Arkansas Caddisfly

Protoptila arca

San Marcos Caddisfly

Family HYDROPTILIDAE

Hydroptila decia

Knoxville Micro Caddisfly

Neotrichia kitae

Kite's Micro Caddisfly

Ochrotrichia alsea

Alsea Micro Caddisfly

Ochrotrichia contorta Contorted Micro Caddisfly

Ochrotrichia phenosa

Deschutes Micro Caddisfly

Ochrotrichia provosti

Provost's Micro Caddisfly

Ochrotrichia vertreesi Vertree's Micro Caddisfly

Oxyethira florida

Florida Micro Caddisfly

Family KOKIRIIDAE

Taskiria mccubbini

Taskropsyche lacustris

Family LEPIDOSTOMATIDAE

Lepidostoma fischeri Fischer's Caddisfly

Lepidostoma goedeni

Goeden's Caddisfly

Family LEPTOCERIDAE

Ceraclea floridana Florida Longhorn Caddisfly

Ceraclea vertreesi

Vertree's Caddisfly Oecetis parva

Little Longhorn Caddisfly

## Westriplectes pedderensis

#### Family LIMNEPHILIDAE

Apatania tavala Cascades Caddisfly

Archaeophylax vernalis

Cryptochia excella

Kings Canyon Caddisfly

Cryptochia neosa
Blue Mountains Caddisfly

Ecclisomyia bilera King's Creek Caddisfly

Farula davisi

Green Springs Mountain Caddisfly

Farula jewetti
Mount Hood Caddisfly

Farula reaperi
Tombstone Prairie Caddisfly

Glyphopsyche missouri Missouri Caddisfly

Limnephilus alconura Kiamath Caddisfly

Limnephilus atercus Fort Dick Caddisfly

Neothramma andersoni Colombian Gorge Caddisfly

Oligophlebodes mostbento
Tombstone Prairie Oligophlebodes

Philocasca oron Clatsop Caddisfly

# Family ODONTOCERIDAE

Psilotreta hansoni

#### Family PHILOPOTAMIDAE

Dolophilodes oregona Oregon Caddisfly

Family PHILORHEITHRIDAE

Ramiheithrus kocinus

Family PLECTROTARSIDAE

Nanoplectrus truchnasi

Family POLYCENTROPODIDAE

Tasmanoplegas spilota

### Family RHYACOPHILIDAE

Rhyacophila alexandra Alexander's Caddisfly

Rhyacophila colonus Obrien Caddisfly

Rhyacophila fenderi Fender's Caddisfly Rhyacophila haddocki Haddock's Caddisfly

Rhyacophila lineata Castle Crags Caddisfly

Rhyacophila mosana Bilobed Caddisfly

Rhyacophila spinata Spiny Caddisfly

Rhyacophila unipunctata One-spot Caddisfly

#### Family SERICOSTOMATIDAE

Agarodes ziczac

Zigzag Blackwater Caddisfly

# Family STENOPSYCHIDAE

Stenopsychodes lineata

#### Order ZORAPTERA

Family ZOROTYPIDAE

Zorotypus swezeyi Swezey's Zoroapteran

## Class ONYCHOPHORA

## Order ONYCHOPHORA

Family PERIPATOPSIDAE

Tasmanipatus barretti

#### Class BIVALVIA

## Order UNIONOIDA

Family HYRIIDAE

Hyridella moretonicus

#### Family MARGARITIFERIDAE

Margaritifera monodonta Spectacle Case

#### Family UNIONIDAE

Alasmidonta arcula Altamaha Arcmussel

Alasmidonta atropurpurea Cumberland Elktoe

Alasmidonta heterodon Dwarf Wedge Mussel

Alismodonta varicosa Brook Floater

Anodonta californensis California Floater

Carunculina cylindrellus Pale Lilliput

Carunculina lividus
Purple Lilliput

Carunculina pullus Savannah Lilliput

Dysnomia brevidens
Cumberlandian Combshell

Dysnomia capsaeformis Oyster Mussel

Dysnomia florentina curtisi

Curtis Pearlymussel

Dysnomia florentina florentina Yellow-blossom

Dysnomia florentina walkeri Tan Riffleshell

Dysnomia metastriata
Upland Combshell

Dysnomia obliquata obliquata Catspaw

Dysnomia obliquata perobliqua White Catspaw

Dysnomia othcoloogensis Southern Acornshell

Dysnomia penita Southern Combshell

Dysnomia torulosa gubernaculum Green-blossom

Dysnomia torulosa rangiana Northern Riffleshell

Dysnomia torulosa torulosa Tubercled-blossom

Dysnomia triquetra Snuffbox

*Dysnomia turgidula* Turgid-blossom

Elliptio jayensis Flat Spike

Elliptio marsupiobesa Cape Fear Spike

Elliptio waccamawensis Waccamaw Spike

Lampsilis australis Southern Sandshell

Lampsilis salinasensis Salina Mucket

Lampsilis subangulata Shinyrayed Pocketbook

Leguminaia compressa

Nephronaias sloatianus Purple Bankclimber

Quadrula cylindrica strigillata Rough Rabbitsfoot

Quadrula intermedia Cumberland Monkeyface

Simpsoniconcha ambigua Salamander Mussel

Truncilla cognata Mexican Fawnsfoot Unio elongatulus
Villosa choctawensis
Choctaw Bean
Villosa fabalis
Rayed Bean
Villosa ortmanni
Kentucky Creekshell
Villosa perpurpurea
Purple Bean
Villosa trabalis

Cumberland Bean

Order VENEROIDA
Family PISIDIIDAE
Pisidium sanguinichristi
Pisidium ultramontanum
Montane Peaclam
Class GASTROPODA

Order BASOMMATOPHORA
Family PLANORBIDAE
Helisoma jacksonense
Jackson Lake Snail

Order MESOGASTROPODA
Family ASSIMINEIDAE
Omphalotropis exquisita
Omphalotropis innesi

Family DIPLOMMATINIDAE Diplommatina hyalina Palaina strigata kororensis

Family HYDROBIIDAE

Antrobia breweri

Apachecoccus arizonae

Bylas Springsnail

Beddomeia hermansi

Coxiella striata

Mexithauma churinceanus
quadripaludium

Mexithauma de Cienegas Snail

Nymphophilus minckleyi

Nymphophilus de Minckley Snail

Phrantela marginata

Pseudotricula eberhardi

Pyrgulopsis neomexicana

Nanocochlea parva
Family PUPINIDAE
Pupina coxeni

Pyrgulopsis ogmoraphe

Socorro Snail

Royal Marstonia

Pupina pfeifferi

Order

STYLOMMATOPHORA
Family CAMAENIDAE
Amplirhagada novelta
Turgenitubulus christenseni

Family GEOMITRIDAE
Actinella armitageana
Caseolus abjectus
Caseolus commixtus
Caseolus consors
Caseolus hartungi

Family HELICARIONIDAE
Helicarion semoni
Helicarion submissus
Theskelomensor lizardensis

Family HELICIDAE

Hemicycla glyceia

Family HYGROMIIDAE Trochoidea spratti

Family ORTHALICIDAE

Bothriembryon angasianus

Bothriembryon tasmanicus

Bothriembryon tasmanicus
Class TURBELLARIA

Order TRICLADIDA
Family KENKIIDAE
Kenkia rhynchida
Malheur Cave Planarian
Sphalloplana holsingeri
Holsinger's Groundwater Planarian
Sphalloplana subtilis
Biggers' Groundwater Planarian

# Index

"argens", Yssichromis 185 acacrianica, Codringtonia 174 Acrocephalus 49, 158 "backflash cryptodon", Lipochromis Acalyphes 252 ACROCERIDAE 250 Acanthaeshna 105 acrocnema, Boloria 104 "black cryptodon", Lipochromis 85 Acanthanura 250 Acrodipsas 102 "dwarf bigeye scraper", Astatotilapia 84 Acanthidops 162 acrodonta, Pteralopex 9 "frogmouth", Harpagochromis 85 acanthinula, Pronesopupa 216 acroleucus, Chortippus 108 "jewel", Tilapia 86 Acanthinula 217 Acrolophitus 108 "Kyoga flameback", Xystichromis 86 Acanthiops 60 ACROLOXIDAE 112 "little black", Tilapia 86 Acanthiza 49, 132 Acroloxus 112 "long snout", Prognathochromis 85 Acanthobrama 183 acros, Eremichthys 72 "parvidens-like", Lipochromis 85
"rainbow sheller", Ptyochromis 86
"red-eye guiarti", Harpagochromis 184 Acanthochelys 62, 165 Actenoides 44, 153 Acanthocobitis 132 acticola, Gerbillus 242 Acanthocyclops 92 Actinella 124, 174, 215, 256 "ruby", Haplochromis 85 Acantholingua 77 ACTINIARIA 128, 217 "Rusinga oral sheller", Ptyochromis 86 Acanthometropus 186 Actinodura 158 "shovelmouth", Astatotilapia 84 Acanthomyops 99 Actinonaias 172 "small obesoid", Lipochromis 85 actinophora, Actinella 174 Acanthorutilus 202 "yellow-green", Tilapia 86 ACTINOPTERYGII 70, 132, 167, 183, acarpicus, Insuetophrymus 67 202, 235, 243, 246 ACAVIDAE 120 (unknown) 110 Accentor, Yemen 158 aculabrum, Cambarus 93 'Alectroenas' 180 oculeatus multiaculeatus, Tachyglossus accepta, Fonscochlea 116 'Athene' 181 Accipiter 32, 33, 147, 148 'Laphopsittacus' 180 aculeatus santaeannae, Gasterosteus ACCIPITRIDAE 32, 147, 198, 242 'Nanocochlea' 256 aceramarcae, Gracilinanus 3 'Napaeus' 245 aculeatus williamsoni, Gasterosteus 247 acerina, Gymnocephalus 206 'Necropsittacus' 181 acuminata, Jardinella 116 Aceroion 8, 136, 177 'Scops' 181 acuminata, Solenopsis 101 Aceros 44 acuminatus, Catabasis 203 acerosus, Viviparus 173 aaa, Cavaticovelia 251 acuminatus, Ophiogomphus 107 acervatus, Orymaeus 121 Aaadonta 214 acunhae, Nesospiza 55 Acestrura 43 Aaptosyax 202 acuta, Elimia 117 Aardwolf 224 acetabulosus, Mormopterus 13 acuta, Nesosydne 251 aboster, Syngnathus 205 Achalinus 61 acuticauda, Apus 43 achates, Taphazous 10 abbotti, Gonocephalus 199 acuticauda, Sterna 38 Achatina 213 abbotti, Papasula 30 acuticeps, Etheostoma 169 Achatinella 120, 188, 238 abbreviata, Achatinella 188 acuticosta, Mautodontha 189 abbreviata, Leiostyla 127 ACHATINELLIDAE 120, 188, 213, 238 acutidens, Pheidole 101 ACHATINIDAE 121, 213 abbreviata, Samoana 215 acutifrons, Cephalaeschna 106 abbreviatus abbreviatus, Microtus 232 Acheilognathus 71 acutirostris, Heteralocha 182 acheron, Papilio 244 abbreviatus fisheri, Microtus 232 acutirostris, Taudactylus 67 acherontis, Procambarus 94 abbreviatus, Haplophthalmus 97 acutissima, Hirasea 124 acheronytes, Gammarus 185 abbreviatus, Microtus 197 acutissima, Pseudoglessula 217 achlys, Euryphura 253 abdominalis, Hippocampus 81 acutissimus, Medionidus 111 Aciagrion 208 abei, Hynobius 68 acutorostrata, Balaenoptera 141 acicula, Bythiospeum 115 abei, Myotis 194 acutum, Kinosternon 166 Acicula 113, 210 abeillei, Orchesticus 162 acutus, Crocodylus 58 ACICULIDAE 113, 210 abendanoni, Telmatherina 79 acutus, Lagenorhynchus 242 acidens, Psammochromis 85 aberrans, Niphargus 90 adalberti, Aquila 33 Acilius 98 aberti, Cyprogenia 110 adamantina, Tryonia 212 Acinonyx 16, 223 abidi, Petaurus 5 adami, Rhinolophus 194 Acipenser 70, 167, 235, 236 abjectus, Caseolus 256 adamsoni, Hephaestus 83 ACIPENSERIDAE 70, 167, 235 abnormis, Scolopendra 89 adansoni, Hemicycla 133 ACIPENSERIFORMES 70, 167, 235 abrasus, Molossops 139 Addax 20 acis bartrami, Strymon 252 abrau muhlisi, Clupeonella 236 Addax 20 Acneus 249 abrau, Clupeonella 202 Adder, Namaqua Dwarf 62 Acomys 23, 143 Abrawayaomys 23 Adder, Plain Mountain 62 Acornshell 187 Abrocoma 28 addita, Rhinomyias 52 Acornshell, Southern 255 **ABROCOMIDAE 28** Acraea 252 adeia, Mugilogobius 87 Abronia 59 adela, Oreotrochilus 153 Acraea 252 abrupta, Lampsilis 111 adelaidensis, Tiliqua 61 ACRAEIDAE 252 abstrusus, Prosciurillus 22 Adelocosa 88 acraeina, Erikssonia 102 aburri, Aburria 149 Adelopoma 114 Acrantophis 61 Aburria 149 ACRIDIDAE 108, 133, 187, 254 Adelotus 167 abyssicola, Bathyraja 201

Adelphicos 61

Acridotheres 164

abyssinica, Genetta 195

adelphus, Bulimulus 215 adersi, Cephalophus 21 Adetomyrma 99 adiaste atossa, Speyeria 253 Adjutant, Greater 31 Adjutant, Lesser 31 adlerzi, Epimymra 100 adolfi, Xerosecta 175 adonis, Poecilmitis 103 ADRIANICHTHYIDAE 80 Adrianichthys 80 adspersa, Mogurnda 247 adspersus, Liamys 142 adspersus, Paraphoxinus 202 aduitrix, Trachemys 64 adustus, Rattus 26 adustus, Tryphomys 27 Advena 125, 190 adytum, Megalagrion 106 aeacus kaguya, Troides 253 aedium, Plagiodontia 28 aegagrus aegagrus, Capra 228 aegagrus blythi, Capra 228 aegagrus chialtanensis, Capra 228 aegagrus cretica, Capra 228 aegagrus, Capra 21 Aegialia 99, 249 Aegista 213 **AEGITHALIDAE 161** Aegithalos 161 aeglefinus, Melanogrammus 77 Aegolius 152 Aegotheles 43 **AEGOTHELIDAE 43** Aegypius 148 aelleni, Myotis 12 aello, Nyctimene 136 aelocephalus, Psammochromis 85 aemonae, Pseudocandona 98 aemula, Pillomena 174 aenea, Murina 138 aenea, Rana 201 aeneus, Aneides 167 aenigma, Hemitriccus 156 Aepyceros 130, 227 Aepyornis 179 AEPYORNITHIDAE 179 Aepypodius 34 aequatorialis, Pithecia 241 aequatorianus, Molassops 13 aequipinnulus, Danio 202 Aeretes 142 aero, Pipistrellus 194 aerosa, Kerivoula 194 aerosus, Melomys 144 aesacus, Ornithoptera 105 Aeschrithmysus 248 Aeschrithmysus 248 Aeshna 105, 106, 171 AESHNIDAE 105, 171, 237 aesiodora, Dirce 252 aestiputeus, Gambusia 205 Aethalops 136 aethesa, Arawacus 102 aethiopicus aethiopicus, Phacochoerus 226 aethiopicus delameri, Phacochoerus

226 aethiops djamdjamensis, Cercopithecus 222 Aethiothemis 208 Aethamys 143, 242 Aethopyga 53, 161 afer, Pseudobarbus 168 afer, Strongylognathus 102 affinis jimiensis, Danaus 237 affinis, Ninox 152 affinis, Parapinnixa 96 affinis, Partula 190 affinis, Penelopides 154 affinis, Sphaerolana 97 africana, Epimyrma 100 africana, Kerivoula 194 africana, Loxodonta 19 africana, Mustela 195 africanus aeliani, Phacochoerus 226 africanus, Conus 120 africanus, Equus 19 Afrithelphusa 95 Afrixalus 243 Afrocyclops 185 Afroedura 165 Afrogyrus 113 Afropavo 34 afzelii, Afrithelphusa 95 Agabus 98, 248 agami, Agamia 147 Agamia 147 AGAMIDAE 59, 199, 234 Agapetus 254 Agapornis 39, 151 agarhecta, Pyrgulapsis 211 Agarodes 255 agassizi, Ambassis 206 agassizi, Salvelinus 183 agassizii, Gopherus 65 Agathothoma 213 Agelaius 56 Agelastes 34 agilis, Amazona 39 agilis, Gracilinanus 135 agilis, Hylobates 140 Aglaeactis 43 Aglaodiaptomus 91 Aglymbus 248 agnella, Kerivoula 12 agnewi, Roblinella 174 agnus, Rhithradytes 99 Agonum 248 agostinhoi, Oxychilus 128 Agouti 145 AGOUTIDAE 145 Agriades 102 agricola, Pantinonemertes 217 Agriocharis 149 agrioides, Amphipteryx 106 AGRIOLIMACIDAE 121, 173 Agriornis 47 Agrotis 186 Aguanaval, Cachorrito del 243 aguirrepequenoi, Notropis 73 ahenea, Elliptio 172 aheneus, Leiopotherapon 168 ailaketoae, Hedleyoconcha 123

Ailuroedus 164 Ailuropoda 17 Ailurops 193 Ailurus 18 aimei, Hippocampus 81 Aimaphila 162 aitkeni, Sminthopsis 3 Aix 147 ajamaruensis, Melanotaenia 204 ajanensis, Paludomus 119 Akalat, East Coast 52 Akalat, Gabela 52 Akalat, Iringa 52 Akalat, Usambara 52 akamatus, Bulimulus 126 Akekee 56 Akepa 56 Akialoa 181 Akiapolaau 56 Akikiki 56 akili, Alburnus 71 akiratadai, Awalycaeus 213 Akodon 23, 143 Akohekohe 56 alabamae, Alosa 71 alabamae, Palaemonias 93 Alabamaubria 249 alabamensis, Amphigyra 113 alabamensis, Elimia 117 alabamensis, Pseudemys 64 alabamensis, Vertigo 175 alabastrinus, 'Napaeus' 245 alachua, Branchinella 91 Alaena 102 alai, Fulica 36 alaicus, Ellobius 24 alalunga, Thunnus 207 alalunga, Thunnus 236 Alamoo, Oopu 206 alamosae, Tryonia 212 alani, Cyclodina 60 alaotrensis, Rheocles 243 alaschanicus, Phoenicurus 160 Alasmidonta 110, 209, 255 alata, Diplommatina 210 alata, Taheitia 212 Alauahio, Maui 163 Alauahio, Oahu 56 Alauda 47 ALAUDIDAE 47, 157 alba, Cacatua 40 alba, Geocrinia 67 alba, Peripatopsis 109 alba, Tirumala 208 albanicus, Barbus 202 albanyensis, Elimia 117 albata, Palaina 210 albata, Parantica 171 Albatross, Amsterdam 30 Albatross, Buller's 146 Albatross, Grey-headed 146 Albatross, Royal 146 Albatross, Short-tailed 29 Albatross, Sooty 146 Albatross, Wandering 30 Albatross, Waved 146 albatrus, Diomedea 29

alberti, Crax 34 alberti, Menura 157 alberti, Prionops 49 albertinae, Streptocitta 164 albertinum, Glaucidium 42 albertisii, Pseudochirops 4 albicandatus, Mystromys 25 albicauda, Alticola 143 albicauda, Olallamys 146 albicaudata, Eumyias 158 albicilla, Haliaeetus 148 albicollis, Rynchops 38 albicosta, Euploea 104 albidens, Coccymys 23 albidinuchus, Lorius 152 albidus, Alburnus 71 albifacies, Myioborus 163 albifacies, Poecilotriccus 156 albifacies, Sceloglaux 181 albifrons adustus, Cebus 221 albifrons aequatorialis, Cebus 221 albifrons cesarae, Cebus 221 albifrons cuscinus, Cebus 222 albifrons hypoleucus, Cebus 222 albifrons leucocephalus, Cebus 222 albifrons malitiosus, Cebus 222 albifrons trinitatis, Cebus 222 albifrons yuracus, Cebus 222 albifrons, Henicophaps 151 albifrons, Leucorrhinia 244 albifrons, Palpopleura 107 albifrons, Platysteira 160 albigena aterrimus, Cercocebus 245 albigula, Myzomela 199 albigularis, Rhinomyias 52 albinasus, Chiropotes 241 albinucha, Columba 151 albipectus, Pyrrhura 41 albipennis, Penelope 34 albipes, Arborimus 197 albipes, Conilurus 178 albipes, Myomys 144 albipinnatus, Gobio 202 albirostris, Cervus 20 albirostris, Lagenorhynchus 242 albispinus, Proechimys 146 albivallis, Lepidomeda 72 albiventris, Dacnis 162 albiventris, Myiagra 51 albiventris, Myiornis 156 albiventris, Spanglerogyrus 249 albizona, Vipera 62 albocarinata, Omphalotropis 210 albocaudata, Stenocephalemys 145 albocinctus, Acridotheres 164 albofrontata, Gerygone 159 albofuscus, Scotoecus 139 albogulare, Malacopteron 159 albogularis albotorquatus, Cercopithecus 222 albogularis zammaranoi, Cercopithecus 222 albogularis, Zosterops 53 alboguttatus, Chalinolobus 12 alboini, Strongylognathus 102 albolabris, Amastra 188 albolimbatus, Megalurus 51

albolineata, Hyla 201 albolineatus, Fundulus 183 alboniger, Hylopetes 22 albonotatus, Crocias 158 albopilasa, Lichnanthe 250 albopunctatus, Dasyurus 3 albopunctatus, Heleioporus 167 albostriatus, Chlidonias 38 albula, Coregonus 204 Alburnus 71, 202 albus, Luciogobius 206 albus, Parphyria 180 albus, Scaphirhynchus 70 Alca 180 alcalicus grahami, Oreochromis 247 ALCEDINIDAE 44, 153, 198, 246 Alcedo 44, 153 Alcelaphus 130, 227 alces cameloides, Alces 226 Alces 226 Alchichica, Charal de 78 alchichica, Poblana 78 ALCIDAE 38, 150 alcimeda alcimeda, Cymothoe 253 Alcippe 49, 158 alcon, Maculinea 170 alconura, Limnephilus 255 alcorni, Pappogeomys 22 alcyone, Rhinolophus 137 aldabrana, Nesillas 181 aldabranus, Dicrurus 164 alebion chungianus, Graphium 253 alecto, Aethalops 136 alecto, Cyttarops 136 Alectoris 149 Alectroenas 180 Alectrurus 47, 156 alepidotus, Paraphoxinus 73 Alethe, Thyolo 49 Alethe 49 alethina, Rhinophylla 137 alethorhytidus, Bulimulus 126 alexandra, Rhyacophila 255 alexandrae, Ornithoptera 105 alexandrae, Phalanger 193 alexandrae, Polytelis 41 alexandri, Gulickia 120 alexandri, Lanistes 113 alexandri, Paraxerus 142 alfredi, Cervus 20 algea abjecta, Euploea 237 algea eleutho, Euploea 237 algea schmeltzi, Euploea 237 algeriana, Epimyrma 100 Algyroides 60 aliciae, Aglaeactis 43 alienus, Histiotus 12 Alionycteris 8 Alismodonta 255 Alisterus 151 alius, Malaconotus 48 alixii, Clytoctantes 45 aljibensis, Deronectes 98 Allactaga 23, 142, 143 allamanica, Vallonia 217 allanae, Lerista 60 Allanaspides 90

allenbyi, Gerbillus 24 alleni, Galago 139 alleni, Grallaria 46 alleni, Gulella 216 alleni, Hodomys 143 alleni, Rhogeessa 139 alleni, Zenarchopterus 205 Allenopithecus 140 allex, Crocidura 6 Alligator, Chinese 58 alligator, Ptilinopus 151 Alligator 58 **ALLIGATORIDAE 58** allisonae, Antiponemertes 128 Allocebus 13 Allocharopa 123, 174 Allochromis 84 ALLOCRANGONYCTIDAE 89 Allocrangonyx 89 Allodiaptomus 91 Allognathus 174 alloia, Nesopupa 216 Alloperla 187 Allorhizucha 107 Allotoca 80 alluaudi alluaudi, Seychellibasis 237 allynsmithi, Helminthoglypta 125 allynsmithi, Sonorella 174 Almirante, Rivulus 205 Aloeides 102, 252 Alona 90 Alopia 239 Alopochen 179 alosa, Alosa 202 Alosa 71, 202 Alouatta 14, 221, 241 alpenae, Coregonus 183 alpicola, Apodemus 197 alpina hoffmanni, Ochotona 233 alpina nitida, Ochotona 242 alpina, Lacerta 200 alpina, Rosalia 98 alpinum, Bythiospeum 211 alpinus, Anairetes 47 alpinus, Cuon 16 alpinus, Gobiomorphus 87 alpinus, Strongylognathus 102 alsea, Ochrotrichia 254 Alsodes 201 Alsophis 61, 182 alstoni, Micoureus 135 altamirai, Suboestophora 175 alterna, Westraltrachia 122 alternatus, Neseis 251 altiapica, Opanara 123 alticola alticola, Perognathus 232 alticola, Belgrandiella 115 alticola, Maxomys 24 alticola, Perognathus 142 alticola, Poospiza 55 Alticola 23, 143 alticorps, Onychostoma 73 altilis, Lampsilis 111 altipinnis, Parambassis 206 altirostre, Chrysomma 50 altirostris, Turdoides 160 altivelis ryukyuensis, Plecoglossus 236

altivelis, Lepidomeda 183 altonagai, Papilloderma 175 altum, Pleurobema 111 alutaceus, Rhantus 98 alvarezdelvillari, Cyprinella 71 alvarezi, Cyprinodon 183 alvarezi, Gambusia 80 alvaroi, Pristidactylus 199 alveare, Pleurocera 118 alveus, Lottia 187 alvordensis, Gila 72 ALYCAEIDAE 213, 239 Alytes 66 Alzoniella 114 amabilis, Charmosyna 40 amabilis, Elaphoidella 96 amabilis, Rhyacophila 187 amadi, Weberogobius 87 Amakihi, Greater 181 Amakihi, Kauai 56 amakosa albescens, Durbania 252 amakosa flavida, Durbania 252 amaltheae, Oxychilus 128 amamiensis amamiensis, Asiagomphus amamiensis okinawanus, Asiagomphus amancicoi, Scaevatula 213 Amandava 57 amaniensis, Cymothoe 253 amaniensis, Gulella 216 amaniensis, Tayloria 217 Amanipodagrion 107 amargosus, Ambrysus 251 amarus, Hybognathus 72 amarus, Puntius 73 Amastra 121, 188, 189 AMASTRIDAE 121, 188 amastroides, Bulimulus 126 amatitlanensis, Mastigodiaptomus 207 amatolica, Bufo 66 Amauris 104 amaurocephala, Nonnula 154 Amaurocichla 49 amaurodytum peles, Megalagrion 237 amauropterus, Pelargopsis 153 Amaurornis 36 Amaurospiza 162 amaurotis, Philydor 155 Amazilia 43 Amazon, Black-billed 39 Amazon, Blue-cheeked 151 Amazon, Cuban 151 Amazon, Green-cheeked 40 Amazon, Hispaniolan 151 Amazon, Imperial 40 Amazon, Lilac-crowned 151 Amazon, Puerto Rican 40 Amazon, Red-browed 40 Amazon, Red-necked 39 Amazon, Red-spectacled 40 Amazon, Red-tailed 40 Amazon, St Lucia 40 Amazon, St Vincent 40 Amazon, Vinaceous 40 Amazon, Yellow-billed 151

Amazon, Yellow-faced 40

Amazon, Yellow-headed 40 Amazon, Yellow-shouldered 40 Amazona 39, 40, 151 amazonina, Hapalopsittaca 41 ambagiosus, Placostylus 126 AMBASSIDAE 206, 244 Ambassis 206, 244 ambigua, Simpsonaias 133 ambigua, Simpsoniconcha 255 Amblema 110 Ambloplites 83 AMBLYCIPITIDAE 76 AMBLYOPSIDAE 77 Amblyopsis 77 Amblyornis 164 Amblyrhiza 179 Amblyrhynchus 59 Amblysomus 5, 241 amboimensis, Laniarius 48 amboinensis, Alisterus 151 amboinensis, Cuora 165 Ambrysus 251 ambusta, Auriculella 213 Ambystoma 68, 246 AMBYSTOMATIDAE 68, 246 amdenus, Radiodiscus 123 Ameca 184 amecae, Notropis 183 AMEIRIDAE 96 Ameiva, Martinique Giant 182 Ameiva 61, 182 Ameletus 250 americana mexicana, Antilocapra 227 americana peninsularis, Antilocapra 227 americana sonoriensis, Antilocapra 227 americana, Dolania 250 americana, Grus 36 americana, Monodelphis 135 americana, Rhea 146 americanus, Driloleirus 109 americanus, Nicrophorus 99 americanus, Protomognathus 101 americanus, Siphonorhis 43 amherstiae, Chrysolophus 149 amiculus, Dolapex 125 amistadensis, Gambusia 184 Ammodillus 23 Ammodorcas 20 Ammodramus 162 ammodytes transcaucasiana, Vipera 246 ammon ammon, Ovis 229 ammon collium, Ovis 229 ammon darwini, Ovis 229 ammon hodgsonii, Ovis 229 ammon jubata, Ovis 229 ammon karelini, Ovis 229 ammon nigrimontana, Ovis 229 ammon polii, Ovis 229 ammon, Ovis 21 Ammonitella 126 Ammopelmatus 108 Ammospermophilus 22 Ammotragus 20, 245 amnicoloides, Somatogyrus 211

amniculus, Craterocephalus 78 amoenus, Phylloscopus 51 Amorphochilus 11 Ampelioides 156 Ampelita 120 ampeloni, Plagiolepis 101 AMPHIBIA 66, 132, 166, 182, 201, 235, 243, 246 amphibius tschadensis, Hippopotamus amphichaenus, Potamilus 112 Amphicyclotulus 117, 188 Amphidromus 173 Amphigyra 113 Amphipod, Alabama Well 90 Amphipod, Arizona Cave 89 Amphipod, Balcones Cave 89 Amphipod, Barr's Cave 89 Amphipod, Bath County Cave 89 Amphipod, Bifurcated Cave 89 Amphipod, Bousfield's 90 Amphipod, Bowman's Cave 89 Amphipod, Burnsville Cove Cave 89 Amphipod, Cascade Cave 89 Amphipod, Central Missouri Cave 89 Amphipod, Clanton's Cave 89 Amphipod, Cooper's Cave 89 Amphipod, Devil's Sinkhole 89 Amphipod, Diminutive 90 Amphipod, Elevated Spring 89 Amphipod, Ephemeral Cave 89 Amphipod, Ezell's Cave 89 Amphipod, Florida Cave 89 Amphipod, Grady's Cave 89 Amphipod, Greenbrier Cave 89 Amphipod, Hara's Cave 89 Amphipod, Hay's Spring 89 Amphipod, Hobb's Cave 89 Amphipod, Illinois Cave 185 Amphipod, Kaui Cave 90 Amphipod, Long-legged Cave 89 Amphipod, Mackenzie's Cave 89 Amphipod, Malheur Cave 89 Amphipod, Minute Cave 89 Amphipod, Morrison's Cave 89 Amphipod, Mountain Cave 89 Amphipod, Noel's 185 Amphipod, Norton's Cave 89 Amphipod, Oklahoma Cave 89 Amphipod, Onondaga Cave 89 Amphipod, Ozark Cave 89 Amphipod, Peck's Cave 90 Amphipod, Pecos 90 Amphipod, Pennsylvania Cave 89 Amphipod, Pickle Springs 89 Amphipod, Pizzini's 90 Amphipod, Reddell's Cave 90 Amphipod, Rubious Cave 185 Amphipod, Spring Cave 90 Amphipod, Stellmack's Cave 90 Amphipod, Subtle Cave 90 Amphipod, Tidewater Interstitial89 Amphipod, Tidewater Stygonectid89 Amphipod, Wengeror's Cave 90 Amphipod, Wisconsin Well 90 AMPHIPODA 89, 185, 237 AMPHIPTERYGIDAE 106 Amphipteryx 106

Amphorella 124 ampla, Elimia 117 ampla, Leptoxis 118 Amplirhagada 121, 173, 214, 244, 256 amplus, Artibeus 137 amplus, Notomys 178 amplus, Perognathus 142 AMPULLARIDAE 113, 173, 210 ampullatus, Hyperoodon 130 amsterdamensis, Diomedea 30 Amychus, Chatham Island 249 Amychus, Cook Strait 249 Amychus 249 Amyda 65 Amytornis 49, 158, 242 ana, Nesidiolestes 251 ANABANTIDAE 88 Anabarilius 71 anae, Paramorariopsis 96 Anaea 253 Anaecypris 71 anaglyptica, Actinella 124 Anagotus 248 Anairetes 47 anak, Uromys 145 anaktuvukensis, Salvelinus 204 analis, Lutjanus 84 anaphiensis, Zonites 175 Anarhynchus 37 Anas 32, 147, 179 ANASPIDACEA 90, 247 Anaspides 247 ANASPIDIDAE 90, 247 Anastomus 147 ANATIDAE 32, 147, 179 anatirostris, Sinocyclocheilus 74 anatoliae, Aphonius 79 anatolicus, Phoxinellus 73 anceophila, Carelia 189 anceps, Pteralopex 9 Anceya 119 anceyana, Lyropupa 216 anceyana, Nesopupa 216 anceyana, Taipidon 190 Ancharius 203 anchietae, Otomys 144 anchietae, Plerotes 9 anchietai, Pipistrellus 13 Anchovy, Freshwater 202 Anculosa 188 Ancylastrum 113 Ancylid, Domed 113 Ancylid, Hood 113 Ancylid, Wicker 113 ANCYLIDAE 113, 173 Ancylus 113, 173 Andalgalomys 23 andamanensis, Centropus 152 andamanensis, Crocidura 6 andamanensis, Dicrurus 164 andamanensis, Euploea 104 anderseni, Rhinolophus 194 andersoni, Marmosa 3 andersoni, Neothramma 255 andersoni, Phaulomys 26 andersonii, Hyla 166

andicola, Agriornis 47

Andigena 154 andinus, Phoenicopterus 31 andinus, Podiceps 179 ANDRENIDAE 251 andrewi, Barbus 71 andrewsi, Fregata 31 Andrias 68, 201 andromache, Troides 171 Androniscus 237 Andropadus 157 Androphobus 198 andruzzi, Phreatichthys 73 Anectothemis 208 Aneides 167 anelpistus, Diploglossus 59 Anemone, Ivell's Sea 217 Anemone, Starlet Sea 128 Anergates 99 anergismus, Pogonomyrmex 101 anerythra, Pitta 47 Anetia, Jaeger's 170 Anetia, Salvin's 170 Anetia 170 anetianus, Pteropus 241 Aneuretus 100 angasianus, Bothriembryon 256 angasii, Tragelaphus 131 angaurana, Aaadonta 214 angelae, Dendroica 163 angelcabrerai, Mesocapromys 28 Angelfish, Resplendent Pygmy 84 angelina, Libellula 107 angelinae, Otus 42 angfa, Melanotaenia 204 angolensis palliatus, Colobus 222 angolensis prigoginei, Colobus 222 angolensis ruwenzorii, Colobus 222 angolensis, Epomophorus 136 angolensis, Laephotis 138 angorae, Nemacheilus 203 Angrobia 114, 188 ANGUIDAE 59, 164, 182, 199 anguinus, Proteus 68 Anguispira 214 angularis, Sinocyclocheilus 74 angulata, Beddomeia 114 angulata, Tryonia 212 angulifer, Epicrates 165 angulosa, Biomphalaria 173 angulosa, Thaanumella 210 angusta, Metacnemis 209 angustata, Elliptio 172 angustatus, Claudius 166 angustatus, Procambarus 94 angustina angustina, Salamis 253 angustina vinsoni, Salamis 253 angustina, Salamis 253 angustior, Vertigo 133 angustipennis, Calopteryx 171 angustipluma, Chaetoptila 181 angustipons, Kinosternon 64 angustirostris, Marmaronetta 32 angustirostris, Todus 154 angustistriata, Tayloria 217 angustus, Hippocampus 81 Angwantibo 139 ANHIMIDAE 147

Anhinga 147 ANHINGIDAE 147 Anhydrophryne 167 Anianiau 56 ANIELLIDAE 246 anijimana, Mandarina 214 ANILIIDAE 200 Anisotremus 84 ankaranensis, Glossogobius 87 ankoberensis, Serinus 56 ankoliae, Tachyoryctes 27 anna, Ciridops 181 annada annada, Erebia 253 annamarulae, Melaenornis 51 annamensis, Mauremys 243 annamurrayae, Phrantela 116 annandalii, Hieremys 64 annectans, Ithamar 251 annectans, Myotis 138 annectens, Ptyochromis 86 annectens, Samoana 127 annectens, Tachyoryctes 27 annectidens, Haplochromis 85 annettae, Elimia 117 anniae, Draparnaudia 124 Anniella 246 annulata, Rhinoclemmys 166 annulifera, Pleurocera 118 Anoa, Lowland 20 Anoa, Mountain 20 ANOBIIDAE 248 anodonta, Angrobia 114 Anodonta 255 Anodontoides 172 Anodorhynchus 40, 180 Anoglypta 123 Anole, Roosevelt's Giant 59 Anolis 59 Anomala 250 ANOMALOPTERYGIDAE 179 Anomalopus 60 ANOMALURIDAE 145 Anomalurus 145 anomalus, Eleothreptus 153 anomalus, Ophiogomphus 171 anomalus, Sciurus 142 anomalus, Zosterops 161 Anomochilus 200 ANOMOPODA 90 Anonymomys 23 anophthalmus, Oreonectes 75 anophthalmus, Sinocyclocheilus 74 anophthalmus, Tasmanipatus 109 anophthalmus, Troglocaris 93 Anoplolepis 100 ANOPLÚRA 98 anops, Adelocosa 88 Anorrhinus 154 ANOSTRACA 91, 132, 169, 207, 244 Anotomys 23 Anoura 137, 194 ansellorum, Crocidura 6 Anser 32 ANSERIFORMES 32, 147, 179 ansorgei ansorgei, Crossarchus 224 ansorgei, Xenocopsychus 161 Ant, Australian 101

Ant, European Red Wood 170 Ant, Sri Lankan Relict 100 Ant-blue, Illidge's 102 Ant-tanager, Black-cheeked 55 Ant-tanager, Sooty 162 antaeus, Epargyreus 252 antalyensis, Capoeta 202 Antanartia 253 antarcticus, Rallus 37 Antbird, Black-tailed 46 Antbird, Grey-headed 46 Antbird, Ochre-rumped 155 Antbird, Rio Branco 45 Antbird, Rio de Janeiro 155 Antbird, Rufous-tailed 155 Antbird, Santarem 155 Antbird, Scalloped 46 Antbird, Slender 46 Antbird, White-breasted 155 Antbird, White-masked 198 Anteater, Giant 5 Antechinomys 193 Antechinus, Atherton 135 Antechinus, Carpentarian 3 Antechinus, Cinnamon 135 Antechinus, Dusky 219 Antechinus, Habbema 193 Antechinus, Lesser 193 Antechinus, Long-nosed 193 Antechinus, Normanby 193 Antechinus, Swamp 219 Antechinus 135, 193, 219 anteisensis, Pseudamnicola 116 antelmeana, Gulella 128 Antelope, Bates' Pygmy 141 Antelope, Beira 21 Antelope, Four-horned 22 Antelope, Giant Sable 228 Antelope, Hunter's 21 Antelope, Roan 130 Antelope, Royal 141 Antelope, Sable 130 Antelope, Tibetan 21 anteronivea, Polyphylla 250 antesella, Percina 84 antevorta, Hypolimnas 253 Anthias 82 ANTHICIDAE 98, 248 Anthicus 98, 248 Anthocephala 153 anthoides, Asthenes 45 anthonyi, Dicaeum 161 anthonyi, Neotoma 25 anthonyi, Pipistrellus 13 anthonyix, Leptoxis 188 Anthops 10 ANTHOZOA 128, 217 Anthracoceros 44, 154 Anthreptes 53, 161 ANTHURIDAE 96 Anthus 48, 157 Antichthonidris 100 Antidorcas 130 antigone, Grus 149 antiguae, Alsophis 61 antillensis, Heteropsomys 178 Antilocapra 227 ANTILOCAPRIDAE 227

Antilope 20 antimachus, Papilio 208 antimena, Hypogeomys 24 antineae, Heterohyrax 20 antiochensis, Anthicus 248 antiochi, Efferia 250 antiphates ceylonicus, Graphium 253 antipodes, Megadyptes 29 Antipodia 252 Antipodochlora 171 Antiponemertes 128 antisensis, Hippocamelus 197 Antlion, Molokai 254 antongilii, Dyscophus 67 antoniae, Carpodectes 46 antoniae, Telmatherina 79 Antpitta, Bicoloured 46 Antpitta, Brown-banded 46 Antpitta, Chestnut 155 Antpitta, Crescent-faced 155 Antpitta, Cundinamarca 46 Antpitta, Elusive 155 Antpitta, Giant 46 Antpitta, Great 155 Antpitta, Hooded 46 Antpitta, Moustached 46 Antpitta, Ochre-fronted 155 Antpitta, Peruvian 155 Antpitta, Santa Marta 155 Antpitta, Scallop-breasted 155 Antpitta, Táchira 46 Antpitta, White-browed 155 Antriscopia 92 Antrobia 114, 256 Antrolana 97 Antrorbis 114 antrorum, Palaemonetes 95 Antrozous 11 Antshrike, Cocha 155 Antshrike, Speckled 46 Antshrike, White-bearded 45 Antthrush, Rufous-fronted 45 Antvireo, Bicoloured 45 Antvireo, Plumbeous 45 Antvireo, Spot-breasted 155 Antwren, Alagoas 46 Antwren, Ash-throated 46 Antwren, Ashy 46 Antwren, Band-tailed 46 Antwren, Black-capped 155 Antwren, Black-hooded 45 Antwren, Klages's 155 Antwren, Narrow-billed 46 Antwren, Orange-bellied 46 Antwren, Pectoral 46 Antwren, Restinga 46 Antwren, Rio de Janeiro 46 Antwren, Salvadori's 46 Antwren, Serra 155 Antwren, Unicoloured 46 Antwren, Yellow-rumped 46 ANURA 66, 132, 166, 182, 201, 235, 243, Anurophasis 149 Aonyx 140 Aotus 14, 194, 221 apache, Oncorhynchus 77 Apachecoccus 256

apalachicolae, Procambarus 94 Apalis, Bamenda 49 Apalis, Kabobo 198 Apalis, Karamoja 49 Apalis, Kungwe 49 Apalis, Namuli 49 Apalis, Taita 49 Apalis, White-winged 49 Apalis 49, 198 Apalone 65 Apalopteron 54 Apatalestea 250 Apatania 255 apatela, Protoploea 171 Apaturopsis 253 Apaturopsis 253 apella margaritae, Cebus 222 apella robustus, Cebus 222 apexfulva vittata, Achatinella 238 apexfulva, Achatinella 120 Aphaenogaster 100 Aphanapteryx 180 Aphanius 79, 205, 243 Aphanotriccus 156 Aphaostracon 114 Aphelocephala 50 APHIDIDAE 251 aphnaeoides, Iolaus 170 Aphodius 250 Aphrastura 45 aphrastus, Sigmodontomys 27 aphylla, Phyllonycteris 11 apia, Trochomorpha 128 apicalis, Anectothemis 208 apicalis, Lenoxus 143 apicalis, Leporillus 178 apicalis, Moho 181 apicalis, Parantechinus 3 APIOCERIDAE 250 APLOCHEILIDAE 79, 205, 243 Aplochiton 204 Aplodontia 230 APLODONTIDAE 230 Aplonis 57, 164, 182 Aplothorax 248 apoda, Neochanna 168 Apodemia 253 Apodemus 23, 143, 197 APODIDAE 43, 153, 198 APODIFORMES 43, 153, 181, 198 apoiensis, Paraegista 213 apolinari, Cistothorus 49 apollinaris, Archon 171 Apollo 105 apollo vinningensis, Parnassius 253 apollo, Parnassius 105 Apomys 23 apophysata, Branchinella 91 aporus, Megupsilon 183 appalachia, Hansonoperla 254 Appalachia 108 apperti, Phyllastrephus 48 approximata, Partula 190 approximata, Trochomorpha 217 Aprasia 60, 165, 234 apricans, Chlorolestes 108 Apron 84

Aprosmictus 151 Aproteles 8 aptera, Apteromantis 171 Apterocychus 249 Apteromantis 171 Apteropanorpa 254 APTEROPANORPIDAE 254 APTERYGIDAE 29 APTERYGIFORMES 29 Apteryx 29 Apus 43, 198 Aquadulcaris 90 aquali, Etheostoma 83 aquatica, Fonscochlea 116 aquaticus carniolicus, Asellus 237 aquaticus cavernicolus, Asellus 237 aquaticus cyclobranchialis, Asellus 237 aquaticus, Hyemoschus 141 aquila, Balanus 208 aquila, Fregata 31 Aquila 33, 148 aquilo, Notomys 144 aguilonia, Formica 170 Ara 40, 180 arabica, Gazella 178 arabicus, Pipistrellus 13 ARACHNIDA 88, 169, 207 Arachnocampa 250 arachnoides, Brachyteles 14 arachnoides, Pyxis 65 Arachnothera 161 araea, Falco 33 araeum, Plagiodontia 179 araeus, Stygobromus 89 aral, Macrognathus 205 arambourgi, Subuliniscus 128 Aramides 36 Aramidopsis 36 ARANEAE 88, 169, 207 Arapaima 202 arata, Ogasawarana 209 aratathomasi, Sturnira 137 Aratinga 40, 152 araucana, Columba 151 arausiaca, Amazona 39 Arawacus 102 arborea, Dendrocygna 32 arborea, Hyla 166 arboreus, Dendrohyrax 226 Arborimus 197 Arborophila 34, 149 arca, Elliptio 110 arca, Protoptila 254 arcaeformis, Epioblasma 110 arcaeformis?, Dysnomia 187 arcaei, Bangsia 162 Arcanator 50 arcanus, Prognathochromis 184 arcanus, Ptilinopus 39 arcena, Appalachia 108 Archachatina 121, 213 ARCHAEOGASTROPODA 112, 173, 187, 209, 238 Archaeolacerta 243 Archaeophylax 255 archboldi, Petroica 199

Archboldia 58

Archboldomys 23 Archerfish, Big Scale 244 archeri, Heteromirafra 48 archeri, Mesodon 215 archeri, Pseudochirops 135 archeri, Sminthopsis 219 archevi, Leiopelma 167 archipelagicus, Indicator 154 Archon 171 arcigerens, Pleuroxia 174 Arcmussel, Altamaha 255 Arcmussel, Ochlockonee 110 Arctictis 224 Arctocebus 139 Arctocephalus 17 Arctodiaptomus 91 Arctogalidia 224 arctoides, Macaca 15 arctos nelsoni, Ursus 224 arcuatus, Taeromys 27 arcula, Alasmidonta 255 arcyensis, Truncatellina 128 Ardea 31, 147 ARDEIDAE 31, 147, 179 ardens, Arborophila 34 ardens, Selasphorus 43 Ardeola 147 Ardeotis 37 ardesiaca, Rhopornis 46 Ardops 137 areaensis, Opanara 123 arenaria, Catinella 175 arenarius, Spalax 27 arenata, Glaresis 250 arenicola, Cicindela 248 areolatus, Trichomycterus 204 arfakensis, Melanotaenia 78 arfakiana, Melanocharis 199 Argali 21 Argali, Altai 229 Argali, Kara Tau 229 Argali, Marco Polo 229 Argali, Mongolian Argali, Gobi 229 Argali, Northern Chinese 229 Argali, Tibetan 229 Argali, Tien Shan 229 Arganiella 114 "argens", Yssichromis 185 argentata, Alcedo 44 argentatus, Pteropus 193 argentea, Apalis 49 argentea, Harmogenanina 125 argenteocinereus, Heliophobius 145 argenteus, Galaxias 76 argenteus, Prognathochromis 184 argentina, Columba 38 argentina, Pheidole 101 argentina, Pseudoatta 101 argentissimus, Plagopterus 73 Argiagrion 106 Argiocnemis 106 argo, Ephemerella 250 Argonemertes 175, 217 Argus, Crested 35 arguta, Partula 190 argynnis, Casinycters 136 Argyresthia 186

ARGYRESTHIIDAE 186 Argyrocupha 252 Argyrodiaptomus 207 argyrognomon lotis, Lycaeides 252 ARHYNCHOBDELLAE 171 ariadne, Orachrysops 103 Ariakehimeshirauo 76 aricomae, Cinclodes 45 aridus, Batrachoseps 68 aridus, Limnebius 249 ariel, Pipistrellus 139 ARIIDAE 76, 203 arimalius, Meriones 25 arinagae, Theba 125 ariomus, Scartomyzon 203 arion, Maculinea 170 Arion 213 ARIONIDAE 213, 244 arionides, Maculinea 170 ARIOPHANTIDAE 189 aristodemus ponceanus, Papilio 253 aristophontes, Papilio 105 aristor, Papilio 208 aristotelis, Siluris 203 Ariteus 11 Arius 76, 204 arizonae arizonae, Sigmodon 233 arizonae plenus, Sigmodon 242 arizonae, Apachecoccus 256 arizonae, Sigmodon 27 arizonae, Sorex 7 arizonensis, Daihinibaenetes 108 arizonensis, Psephenus 249 arizonensis, Sciurus 142 arizonensis, Stygobromus 89 arizonica, Cymbiodyta 249 Arkansia 110 ARMADILLIDAE 208 Armadillo, Brazilian Three-banded5 Armadillo, Giant 5 armandvillei, Papagomys 25 Armatobalanus 208 armatus, Euastacus 96 armenica, Crocidura 193 armenica, Sicista 23 armigera, Lithasia 118 armitageana, Actinella 256 Armsia 121 arnoldii, Strongylognathus 102 arnuxii, Berardius 130 arremonops, Oreothraupis 55 arrosa pomoensis, Helminthoglypta artaxerxes, Harpagochromis 184 artedii, Coregonus 243 Artemia 132 ARTEMIIDAE 132 artesus, Agapetus 254 Arthroleptides 182 arthuri, Vertigo 175 Artibeus 11, 137, 194 articense, Bythiospeum 115 articulata, Tropidophora 118 ARTIODACTYLA 20, 130, 141, 178, 197, 226, 242, 245 Artogeia 253 artus, Hygrotus 185

aruboides, Bermudalana 97 Arubolana 97 aruensis, Bostrichthys 206 arundinum, Redunca 131 Arvicola 143 Asaphomyia 250 asaphrombra, Hedylepta 186 ascanius. Parides 105 ascensa, Austrochloritis 173 ascensionis, Thalassoma 87 Asellia 10 ASELLIDAE 96, 237 Asellus 237 ashangiensis, Ancylus 113 ashi, Mirafra 48 Ashmunella 175 Asiagomphus 107, 238 ASILIDAE 250 Asity, Schlegel's 157 Asity, Yellow-bellied 47 askewi, Fusconaia 172 Aslauga 102 aslini, Turgenitubulus 122 asoka, Puntius 236 asomatus, Lagorchestes 177 Asp 202 aspasma, Chloaeltis 108 asper, Pseudobarbus 73 asper, Zingel 84 asperata, Quadrula 172 asperrima, Eximiorhagada 214 asperrimus, Cottus 82 Aspideretes 65, 166 Aspidites 61 Aspiduchus 247 aspius, Aspius 202 Aspius 202 asprella, Crystallaria 83 Asprete 84 asquamatus, Kosswigichthys 205 Ass, African Wild 19 Ass, Indian Wild 225 Ass, Syrian Wild 225 assamensis, Macaca 15 assimilis, Onychogomphus 107 Assiminea, Pecos 114 Assiminea 114, 210 ASSIMINEIDAE 114, 187, 210, 256 ASTACIDAE 93 Astacoides 95, 208 Astacopsis 95 astacus, Astacus 93 Astacus 93 Astatotilapia 84, 184 ASTEIIDAE 250 asthenes, Aphaostracon 114 Asthenes 45, 155 asticta, Mecistogaster 108 Astraea 112 Astrapia, Arfak 164 Astrapia, Ribbon-tailed 58 Astrapia 58, 164 astrifer, Sanopus 78 astur, Eutriorchis 33 asturiensis, Cryptosaccus 174 astuta, Amplirhagada 121

Astyanax 236

atacamensis, Bufo 201 atacamensis, Myotis 12 atacamensis, Telmatobius 67 Ataeniobius 80 Ataenius 250 atanuiensis, Rhysoconcha 123 Atelerix 241 Ateles 14, 221, 241 Atelognathus 66 Atelornis 44, 154 Atenia 174 ater ater, Notechis 234 ater, Alsophis 61 ater, Apalone 65 ater, Dromaius 179 ater, Merulaxis 155 ater, Suncus 8 atercus, Limnephilus 255 aterina, Elimia 117 aterrima, Pterodroma 30 aterrimus opdenboschi, Lophocebus aterrimus, Lophocebus 140 aterrimus, Probosciger 152 Athene 42 Atherina 204 ATHERINIDAE 78, 168, 183, 204, 243 ATHERINIFORMES 78, 168, 183, 204, atilanica, Crematogaster 100 atilis, Partula 190 ATLANTASELLIDAE 97 Atlantasellus 97 atlantica, Phenacolimax 245 atlanticus, Larus 38 Atlantisia 36, 180 Atlapetes 54, 162 atonius, Truncatellina 217 Atossa 253 atra aurorae, Salamandra 235 atra, Myiagra 159 atra, Porzana 36 atra, Pyriglena 46 atra, Tijuca 156 Atractelmis 249 atramentaria, Victaphanta 175 atrata, Dorcopsis 4 atrata, Emballonura 10 atrata, Pteralopex 9 atratulus, Anergates 99 atremius suigensis, Rhodeus 236 atricapilla, Heteronetta 147 atricapillus, Vireo 56 atriceps, Carduelis 163 atriceps, Echiopsis 62 Atrichornis 47 ATRICHORNITHIDAE 47 Atrichotoxon 215 atrifrons, Odontophorus 149 atrimaxillaris, Habia 55 atripinne, Moxostoma 243 atrocaerulea, Hirundo 48 atrocaudata, Terpsiphone 160 atrogularis, Arborophila 149 atrogularis, Clytoctantes 198 Atrophaneura 105, 208

atropurpurea, Alasmidonta 255 atropurpurea, Xipholena 46 atrorus, Cyprinodon 243 atrosuperciliaris, Paradoxornis 160 attenuata, Feresa 195 attenuata, Partula 190 attenuata, Samoana 127 attenuata, Stenella 129 attenuatus, Hobbseus 94 Attheyella 132 attiguus, Procambarus 94 attila. Crocidura 6 Attila, Ochraceous 47 Attila 47 ATYIDAE 93, 185 atys lunulatus, Cercocebus 222 atys, Cercocebus 140 aubryana, Gymnomyza 54 aucklandica, Anas 32 aucklandica, Coenocorypha 150 audax, Aphanotriccus 156 audax, Characodon 80 audax, Tachyoryctes 27 audouinii, Larus 131 Augastes 153 augustaensis, Hesperodiaptomus 92 Auk, Great 180 Aulacorhynchus 154 aulidion, Notropis 183 Aulopyge 71 aurantia, Partula 190 aurantia, Rhinonicteris 11 aurantia, Tyto 42 aurantiaca, Mantella 67 aurantiaca, Pyrrhula 163 aurantius, Chaetops 158 aurantius, Melonycteris 9 aurarius, Platyrrhinus 137 aurata, Murina 138 aurata, Profelis 241 aurata, Sabanjewia 203 auratus auratus, Isoodon 219 auratus barrowensis, Isoodon 219 auratus, Isoodon 4 auratus, Mesocricetus 25 auratus, Trachypithecus 15 aurea, Diplommatina 210 aurea, Hypseleotris 244 aurea, Litoria 166 aurea, Tominanga 79 aureocincta, Bangsia 54 aureodorsalis, Buthraupis 54 aureola, Mandarina 214 aureonucha, Ploceus 57 aureospinula, Podogymnura 6 aureus, Afrixalus 243 aureus, Arctocebus 139 aureus, Euplectes 164 aureus, Hapalemur 14 aureus, Poecilmitis 170 aureus, Somatogyrus 211 aureus, Teinopalpus 208 auricapilla, Aratinga 40 auriceps, Cyanoramphus 152 auricularia, Margaritifera 110 auricularis, Puffinus 30 auriculata, Partula 190

atropos, Atrophaneura 105

auriculatus, Dorcus 249 Auriculella 188, 213 aurita, Aprasia 60 aurita, Callithrix 14 aurita, Geogale 241 aurita, Myzopoda 11 aurita, Nycteris 136 auritum, Crossoptilon 149 auritus, Batrachostomus 198 auritus, Mesocapromys 28 aurivillii, Cymothoe 253 aurivilliusi, Graphium 208 aurocapitata, Cuora 200 aurolineata, Percina 84 aurorae, Ducula 39 aurulentus, Piculus 155 austeni, Garrulax 198 australasia, Todirhamphus 154 australasica, Macquaria 206 australe, Cheirodon 203 australe, Etheostoma 83 australica, Calamoecia 91 australiensis, Rhynchochydorus 90 australis australis, Petaurus 220 australis packardi, Orconectes 237 australis, Lacerta 243 australis, Apteryx 29 australis, Aslauga 102 australis, Austrogammarus 185 australis, Basilichthys 168 australis, Crateromys 23 australis, Dryococelus 187 australis, Dusicyon 177 australis, Engaeus 95 australis, Eubalaena 129 australis, Gallirallus 149 australis, Helicarion 245 australis, Ictalurus 203 australis, Lagenorhynchus 195 australis, Lampsilis 255 australis, Megascolides 110 australis, Mergus 179 australis, Myotis 194 australis, Ningbingia 122 australis, Ordtrachia 174 australis, Petaurus 135 australis, Phalcoboenus 149 australis, Pseudomys 26 australis, Pseudophryne 167 australis, Tadarida 139 australis, Taphozous 136 australis, Telmatobufo 201 Australophocaena 196 Austrelaps 61 austriaca, Orcula 215 austriana, Belgrandiella 115 Austroassiminea 114 Austrochloritis 173 Austrocordulia 106 Austrogammarus 185 Austroglanis 76, 203 Austromenidia 204 Austropotamobius 93 Austrosaga 109 autocrator, Parnassius 105 Avadavat, Green 57

Avahi 14, 241

avalona, Strymon 103 avalonense, Radiocentrum 126 avellanarius, Muscardinus 145 avellanum, Pleurobema 111 Avenionia 211 avernalis, Fluminicola 211 averni, Beddomeia 114 AVES 29, 131, 146, 179, 197, 242, 245 aviator, Nyctalus 138 Aviceda 148 avittata, Polyphylla 250 Avocettula 153 avunculus, Rhinopithecus 15 Awalycaeus 213 Awaous 206 Awlbill, Fiery-tailed 153 axelrodi, Chilatherina 243 axillaris, Pterodroma 30 axillimentus, Sicyopus 87 Axis 20, 226 Axolotl 68 Aye-aye 14 ayresi, Sarothrura 37 Aythya 32 Ayu-fish, Ryukyu 236 Ayumodoki 203 azarae, Dasyprocta 28 azoreum, Nyctalus 13 aztecus, Molossus 139 Azul, Cachorrito de Charco 80 azurea, Cochoa 50 azurius, Poecilmitis 103 Babax, Giant 158 Babax, Tibetan 158 Babax 158 Babbler, Bagobo 53 Babbler, Black-browed 51 Babbler, Chestnut-faced 160 Babbler, Deignan's 52 Babbler, Ferruginous 160 Babbler, Flame-templed 52 Babbler, Golden-crowned 160 Babbler, Grey-breasted 159 Babbler, Iraq 160 Babbler, Jerdon's 50 Babbler, Marsh 51 Babbler, Melodious 51 Babbler, Pygmy 160 Babbler, Rufous-tailed 158 Babbler, Rusty-crowned 160 Babbler, Slender-billed 160 Babbler, Snowy-throated 52 Babbler, Sooty 52 Babbler, Vanderbilt's 51 Babbler, White-breasted 52 Babbler, White-chested 160 babelis, Latiaxis 173 babelthuapi, Palaua 215 baberi, Hylopetes 142 Babirusa 20 Baboon, Gelada 140 Baboon, Guinea 140 Baboon, Hamadryas 140 Babyrousa 20 babyrussa, Babyrousa 20 bacca, Nesopupa 216 Baccalena 173

bacchus, Pyrgulopsis 211 bachmanii, Vermivora 56 bactrianus, Camelus 20 badeigularis, Spelaeornis 52 badensis, Bythinella 115 Badger, Palawan Stink 17 badhami, Lepidochrysops 103 badia, Catopuma 16 badius kirkii, Procolobus 223 badius bouvieri, Procolobus 222 badius ellioti, Procolobus 245 badius epieni, Procolobus 222 badius foai, Procolobus 222 badius gordonorum, Procolobus 223 badius langi, Procolobus 223 badius lulindicus, Procolobus 223 badius oustaleti, Procolobus 245 badius parmentierorum, Procolobus 223 badius pennantii, Procolobus 223 badius preussi, Procolobus 223 badius rufomitratus, Procolobus 223 badius semlikiensis, Procolobus 223 badius temminckii, Procolobus 223 badius tephrosceles, Procolobus 245 badius tholloni, Procolobus 245 badius waldroni, Procolobus 223 badius, Procolobus 140 baeodon, Maxomys 24 baeri, Aythya 32 baeri, Hylomyscus 242 baeri, Poospiza 55 baeri, Sandracottus 249 baerii baerii, Acipenser 235 baerii baikalensis, Acipenser 235 baerii stenorrhynchus, Acipenser 235 baerii, Acipenser 70 Baetica 109 baeticus, Dussartius 92 BAETIDAE 250 Bagangan 72, 73 BAGRIDAE 76, 203, 247 Baiji 19 baikalensis, Epischura 92 baileyi baileyi, Naemorhedus 229 baileyi cranbrooki, Nacmorhedus 229 baileyi, Crenichthys 79 baileyi, Crocidura 6 baileyi, Naemorhedus 21 baileyi, Noturus 75 baileyi, Thermophis 61 bailevi, Xenospiza 55 bailleui, Loxioides 56 bailloni, Baillonius 154 Baillonius 154 bainsii, Sandelia 88 bairdi, Oreomystis 56 bairdii, Acanthidops 162 bairdii, Berardius 130 bairdii, Tapirus 19 bairdii, Trogon 153 baiulus, Schayera 108 bakeri, Ducula 39 bakeri, Sericulus 58 bakossiorum, Tilapia 86 Balaena 129, 224, 225 balaenarum, Sterna 150

bacchus, Lepidochrysops 170

Balaeniceps 147 BALAENICIPITIDAE 147 BALAENIDAE 18, 129, 224 Balaenoptera 18, 129, 141, 195, 225 BALAENOPTERIDAE 18, 129, 141, 195, 225 BALANIDAE 208 Balantiocheilos 71 Balantiopteryx 10, 136 Balanus 208 balbus, Mixophyes 67 balconis, Stygobromus 89 baldwini, Nesopupa 216 baliensis, Rasbora 74 Baligi, Dislisazancik 79, 243 Baligi, Gokce 71 Baligi, Incilevrek 236 Baligi, Ot 236 Baligi, Siraz 167 Baligi, Yag 73 Balik, Ala 77 Balistes 88 **BALISTIDAE 88 BALITORIDAE 74, 132, 203** balli, Lepidochrysops 103 balli, Otus 152 balli, Poecilmitis 103 ballmanni, Malimbus 57 ballochi, Kiunga 78 baloni, Gymnocephalus 206 balsetensis, Siettitia 185 balstoni, Nannatherina 206 baluensis, Rattus 26 Bamboowren, Spotted 155 bamendae, Apalis 49 banatica, Imnadia 92 banatica, Zubovskia 108 Bandicoot, Ceram 193 Bandicoot, Desert 177 Bandicoot, Eastern Barred 4, 219 Bandicoot, Giant 193 Bandicoot, Golden 4, 219 Bandicoot, Mouse 193 Bandicoot, Papuan 193 Bandicoot, Pig-footed 177 Bandicoot, Southern Brown 219 Bandicoot, Western Barred 4, 219 bandula, Puntius 73 bangsi, Grallaria 155 Bangsia 54, 162 bangwaensis, Bradypterus 158 Bankclimber, Purple 255 Banksula 88 bannermani, Ploceus 57 bannermani, Tauraco 42 Banteng 20 Banza 109 Baolan 73 baoulan, Puntius 73 Barasingha, Upland 226 Baratanago, Nippon 236 baraui, Pterodroma 30 Barb, Asoka 236 Barb, Black Ruby 132 Barb, Border 71 Barb, Cherry 132 Barb, Marico 71 Barb, Namaquab 167

Barb, Shortfin 71 Barb, Side Striped 132 Barb, Treur River 132 Barb, Two Spot 132 barbadensis, Amazona 40 barbara senex, Eira 224 barbarae, Astatotilapia 84 barbarus, Otus 152 Barbastella 11 barbastellus, Barbastella 11 barbata, Penelope 34 barbata, Polyphylla 250 Barbatula 203 barbatus ahoenobarbus, Sus 226 barbatus oi, Sus 226 barbatus, Amytornis 158 barbatus, Dendrortyx 34 barbatus, Xenuromys 145 Barbel, Iberian 71 Barbel-gudgeon, Dalmatian 71 Barbet, Black-banded 154 Barbet, Brown-throated 154 Barbet, Chaplin's 154 Barbet, Five-coloured 44 Barbet, Orange-fronted 154 Barbet, Red-crowned 154 Barbet, Red-faced 154 Barbet, Scarlet-hooded 154 Barbet, Toucan 154 Barbet, White-mantled 44 barbiger, Procambarus 94 Barbopsis 71 barbouri, Graptemys 165 barbouri, Petromyscus 26 Barbouria 95 Barbtail, White-throated 45 Barbus 71, 132, 167, 202 barerae bunta, Kedestes 252 bargibanti, Hippocampus 205 Barkudia 200 barnardi, Austroglanis 76 barnardi, Colophon 99 barnardi, Kapcypriodopsis 97 barnardi, Paramelita 90 barnesiana, Fusconaia 172 baroni, Metallura 43 Baronia, Short-horned 171 Baronia 171 barreimiae, Garra 72 barrenensis, Letomola 214 barrerae, Tympanoctomys 28 barretti, Tasmanipatus 255 barri, Caecidotea 96 barri, Stygobromus 89 barrioi, Alsodes 201 bartelsi, Hylopetes 142 bartelsi, Spizaetus 33 barthi, Biomphalaria 113 barthi, Bulinus 173 bartoni, Chirostoma 78 bartoni, Cichlasoma 85 bartoni, Prognathochromis 184 Barwing, Streaked 158 basajauna, Oxychilus 175 basilanica, Ficedula 50 basilaris japonica, Matrona 237 Basileuterus 55, 163

Basilichthys 168, 204 basilicus, Basileuterus 163 basilii, Hybomys 143 Basilornis 164 basimi, Caecocypris 71 basispina, Branchinella 91 baska, Batagur 64 BASOMMATOPHORA 112, 173, 187, 209, 256 Bass, Giant Sea 82 Bass, Guadalupe 206 Bass, Roanoke 83 Bass, Suwannee 169 Bassaricyon 17, 140 Bassariscus 140 Bat, Angolan Epauletted Fruit 136 Bat, Big Long-nosed 11 Bat, Bonin Fruit 9 Bat, Broad-striped Tube-nosed Fruit136 Bat, Buettikofer's Epauletted Fruit8 Bat, Bulmer's Fruit 8 Bat, Cuban Flower 137 Bat, Cusp-toothed Fruit 9 Bat, d'Anchieta's Fruit 9 Bat, Dyak Fruit 136 Bat, East African Collared Fruit 9 Bat, Fischer's Pygmy Fruit 9 Bat, Geelvinck Bay Leaf-nosed 10 Bat, Geelvink Bay Fruit 9 Bat, Ghost 10 Bat, Golden-capped Fruit 8 Bat, Greater Mouse-eared 138 Bat, Greater Sheath-tailed 10 Bat, Grey 12 Bat, Guam Fruit 177 Bat, Hawaiian Hoary 245 Bat, Hayman's Epauletted Fruit 9 Bat, Indiana 12 Bat, Jamaican Flower 11 Bat, Javan Mastiff 13 Bat, Javan Tail-less Fruit 9 Bat, Javan Thick-thumbed 138 Bat, Kitti's Hog-nosed 10 Bat, Lesser Angolan Epauletted Fruit8 Bat, Lesser Naked-backed Fruit 136 Bat, Lesser Tube-nosed 9 Bat, Lesser Tube-nosed Fruit 136 Bat, Long-fingered 12 Bat, Long-tailed Fruit 9 Bat, Malaita Tube-nosed 9 Bat, Moss-forest Blossom 10 Bat, New Britain Naked-backed 136 Bat, New Zealand Lesser Short-tailed 13 Bat, Orange Fruit 9 Bat, Orange Leaf-nosed 11 Bat, Palau Fruit 177 Bat, Panany Giant Fruit 177 Bat, Philippine Bare-backed Fruit 177 Bat, Philippines Tube-nosed Fruit9 Bat, Pond 12 Bat, Puerto Rican Flower 177 Bat, Pygmy Fruit 136 Bat, Raffray's Sheath-tailed 129 Bat, Ridley's Leaf-nosed 10 Bat, Round-eared Tube-nosed Fruit 136 Bat, São Tomé Collared Fruit 9 Bat, Seram Fruit 9 Bat, Seychelles Sheath-tailed 10

Bat, Short-palate Fruit 136 Bat, Silvery Fruit 193 Bat, Small-toothed Fruit 9 Bat, Sucker-footed 11 Bat, Sulawesi Fruit 136 Bat, Sulawesi Naked-backed Fruit 136 Bat, Swift Fruit 136 Bat, Talaud Fruit 8 Bat, Townsend's Big-eared 13 Bat, Western Naked-backed Fruit 8 Bat, Wroughton's Free-tailed 13 Batagur 64 batchi, Cambarus 93 batesi, Neotragus 141 batesi, Phyciodes 253 batesi, Ploceus 57 batesi, Prionomys 144 Bathanalia 119 Rathmacercus 50 **BATHYERGIDAE 145** Bathyergus 145 Bathygobius 206 Bathyraja 201 bathysciodes, Glacicavicola 99 Batillaria 210 BATILLARIDAE 210 Batis, Gabon 198 Batis 198 Batomys 197, 242 batrachocephalus, Mesogobius 206 Batrachoides 78 **BATRACHOIDIDAE 78 BATRACHOIDIFORMES 78** Batrachophrynus 67 Batrachoseps 68 Batrachostomus 153, 198 Batrachuperus 68 battoides comstocki, Euphilotes 252 Battus 105 battyi, Leptotila 151 baudii, Pitta 156 Baudinella 173 baudinensis, Baudinella 173 baudinianus, Dromaius 179 baudinii, Calyptorhynchus 40 baumanni, Phyllastrephus 157 baunti, Coregonus 204 bavarica, Bythinella 115 bavaricus, Microtus 178 Bavispe, Matalote del 75 Bay-owl, Congo 42 Bayadera 238 bayleyi, Dendrocitta 164 bayoni, Prognathochromis 184 bayoni, Xystichromis 185 Baza, Jerdon's 148 Bdeogale 16, 224 beadlei, Paralabidochromis 85 beadleianum, Pleurobema 172 bealei, Sacalia 64 Beamys 23, 143 Bean, Choctaw 256 Bean, Cumberland 256 Bean, Purple 256 Bean, Rayed 256 Bear, Asiatic Black 18

Bear, Baluchistan 224

Bear, Mexican Grizzly 224 Bear, Polar 129 Bear, Sloth 18 Bear, Spectacled 18 Bear, Sun 195 beatrix, Chalinolobus 137 beatus, Crocidura 6 beauforti, Dobsonia 8 beaumonti, Hemistoma 116 Beaver, Admiralty Island 231 Beaver, Broad-tail 245 Beaver, Eurasian 142 Beaver, Mongolian 245 Beaver, Point Arena Mountain 230 Beaver, Point Reyes Mountain 230 Beaver, Rio Grande 245 Bebrornis 50 Becard, Slaty 156 beccarii, Cochoa 50 beccarii, Crocidura 6 bechsteini, Myotis 12 becki, Pterodroma 30 Reckianum 175 beddardi, Bassaricyon 140 Beddomeia 114, 115, 188, 256 bedfordi, Proedromys 144 bedfordi, Terpsiphone 160 bednalli, Sinumelon 122 Bedotia 204 Bee, Antioch Andrenid 251 Bee, Wallace's Giant 208 Bee, Yellow Banded Andrenid 251 beeri, Acneus 249 Beetle, Caracara Commensal Scarab 250 Beetle, American Burying 99 Beetle, Animas Minute Moss 249 Beetle, Anthony Blister 249 Beetle, Antioch Dunes 248 Beetle, Archbold Scarab 250 Beetle, Arizona Water Penny 249 Beetle, Arizona Water Scavenger 249 Beetle, Atascodera Scarab 250 Beetle, Barbate Scarab 250 Beetle, Beer's False Water Penny 249 Beetle, Beller's Ground 248 Beetle, Big Pine Key Dung 250 Beetle, Blind Cave 99 Beetle, Blue Ground 169 Beetle, Bog Idol Leaf 248 Beetle, Brown's Riffle 249 Beetle, Brownish Riffle 249 Beetle, Burnell's False Water Penny 249 Beetle, Cazier's Tiger 248 Beetle, Ciervo Scarab 99 Beetle, Cobblestone Tiger 169 Beetle, Columbia River Tiger 98 Beetle, Coral Pink Dunes Tiger 248 Beetle, Cresent Dune Scarab 99 Beetle, Curved-foot Diving 248 Beetle, Death Valley Agabus Diving 248 Beetle, Delta Green Ground 98 Beetle, Devil's Hole Warm Spring Riffle Beetle, Disjunct Crawling Water 249 Beetle, Dohrn's Elegant Eucnemid 249 Beetle, Douglas Riffle 249 Beetle, Elusive Diving 248 Beetle, Exiguous Scarab 250

Beetle, Ford's 250 Beetle, Frigate Island Giant Tenebrionid Beetle, Frost's Spring Scarab 250 Beetle, Gammon's Riffle 99 Beetle, Ghost Walker 248 Beetle, Giuliani's Dune Scarab 99 Beetle, Giuliani's Riffle 249 Beetle, Globose Dune 99 Beetle, Greenest Tiger 248 Beetle, Hardy's Scarab 249 Beetle, Hercules 250 Beetle, Hermit 99 Beetle, Hopping's Blister 249 Beetle, Hungerford's Crawling Water 249 Beetle, Idaho Dunes Tiger 248 Beetle, Indiana Minute Moss 249 Beetle, Kauai Flightless Stag 249 Beetle, Kelso Dune Scarab 250 Beetle, Large Scarab 249 Beetle, Leech's Skyline Diving 248 Beetle, Leech's Water Scavenger 249 Beetle, Little Riffle 249 Beetle, Los Olmos Tiger 248 Beetle, Marron's San Carlos Riffle 249 Beetle, Maureen's Minute Moss 249 Beetle, Maureen's Moss 249 Beetle, Miami Roundhead Scarab 250 Beetle, Moapa Warm Springs Riffle 249 Beetle, Moestan Blister 249 Beetle, Mojave Desert Blister 249 Beetle, Mojave Rabbitbrush Longhorn Beetle, Molestan Blister 249 Beetle, Mono Lake Diving 185 Beetle, Morrison's Blister 249 Beetle, Narrow-foot Diving 248 Beetle, Neojuvenile Tiger 248 Beetle, North-eastern Beach Tiger 248 Beetle, Oblivious Tiger 248 Beetle, Ocala Burrowing Scarab 250 Beetle, Pacific Sand Bear Scarab 250 Beetle, Parker's Riffle 249 Beetle, Perrin's Cave 185 Beetle, Piko Anobiid 248 Beetle, Pinnacles Riffle 249 Beetle, Puritan Tiger 98 Beetle, Red Hills Unique Whirligig 249 Beetle, Ricksecker's Water Scavenger 249 Beetle, Robust Riffle 249 Beetle, Rude's Longhorn 248 Beetle, Sacramento 98 Beetle, San Joaquin Dune 99 Beetle, Schaum's Blue Ridge Ground 248 Beetle, Scott Riffle 249 Beetle, Scrub Island Burrowing Scarab 250 Beetle, Scrub Palmetto Flower Scarab 250 Beetle, Seclusive Water Scavenger 249 Beetle, Six-banded Longhorn 248 Beetle, Smyth's Tiger 248 Beetle, Spangler's Diving 248 Beetle, Spiny Florida Sandhill Scarab250 Beetle, Stark's False Water Penny 249 Beetle, Stephan's Riffle 249 Beetle, Subtropical Blue-Black Tiger248

Beetle, Fig Seed Diving 248

Beetle, Folkert's Diving 248

Beetle, Sulphur Springs Diving 248 Beetle, Sylvan Diving 248 Beetle, Tantula Scarab 250 Beetle, Texas Cave 248 Beetle, Texas Minute Moss 249 Beetle, Tibial Scarab 250 Beetle, Tiger 248 Beetle, Tooth Cave Ground 248 Beetle, Tortoise Commensal Scarab 250 Beetle, Travertine Band-thigh Diving 248 Beetle, Utah Diving 248 Beetle, Utah Minute Moss 249 Beetle, Utah Water Scavenger 249 Beetle, Valley Elderberry Longhorn248 Beetle, Variegated False Water Penny249 Beetle, Warm Spring Riffle 249 Beetle, Wawawona Riffle 249 Beetle, White Mountains Water Penny Beetle, White Sand Bear Scarab 250 Beetle, Wilbur Springs Minute Moss 249 Beetle, Wing-shoulder Minute Moss249 Beetle, Woodruff's Dung 250 Beetle, Woody Gulf Dune Scarab 250 Beetle, Woolly Diving 248 behnii, Micronycteris 11 BEHNINGIIDAE 250 beldingi, Geothlypis 55 Belenois 253 Belgrandiella 115, 188, 211 belki, Branchinecta 91 belkini, Brennania 99 bella, Goethalsia 153 Bellamya 119, 120 Bellbird, Bare-throated 156 Bellbird, Three-wattled 46 bellei, Progomphus 107 belleri, Agonum 248 belli, Mathewsoconcha 125 bellii, Beddomeia 114 bellula, Achatinella 120 bellula, Elimia 117 bellulus, Margarornis 155 Belocephalus 109 Belomys 142 Beloneuria 254 BELONIFORMES 80, 168, 205, 243 Belontia 132 BELONTIIDAE 88, 132 Beloribitsa 236 Belostoma 250 BELOSTOMATIDAE 250 belphegar, Nirodia 103 beltrani, Cyprinodon 79 Beluga 70, 236 belvica, Chalcalburnus 167 belzebul ululata, Alouatta 221 belzebuth belzebuth, Ateles 221 belzebuth brunneus, Ateles 221 belzebuth hybridus, Ateles 221 belzebuth, Ateles 14 bemini, Tilapia 86 bengalensis iriomotensis, Prionailurus bengalensis, Eupodotis 37 bengalensis, Gyps 148

bengalensis, Vulpes 195

benguetanus, Papilio 171

benneti, Meridolum 122 bennetti, Casuarius 146 bennetti, Gazella 130 bennettianus, Dendrolagus 135 bennettii, Cynogale 18 benschi, Monias 35 bensoni, 'Lophopsittacus' 180 bensoni, Pseudocossyphus 52 Benthophiloides 206 beoticus, Pseudophoxinus 73 Berardius 130 berezovskii, Moschus 141 bergeri, Homopus 65 bergi, Gymnocharacinus 75 berkeleyi, Hemicycla 174 berlandieri, Gopherus 243 berlepschi, Acestrura 43 berlepschi, Asthenes 45 berlepschi, Dacnis 54 berlepschi, Thripophaga 155 Bermudalana 97 Bermudamysis 97 bermudensis, Bogidiella 89 bermudensis, Currassanthura 96 bermudensis, Spelaeoecia 96 bermudensis, Speleoithona 92 bernardi, Epimyrma 100 bernardi, Leptichnus 215 bernardina, Pyrgulopsis 211 bernardini, Catostomus 75 bernardino allyni, Euphilotes 252 bernardus, Macropus 135 berneri, Heterocleon 250 bernieri, Anas 32 bernieri, Oriolia 49 bernsteini, Sterna 38 bernsteinii, Megapadius 149 berrisfordi, Colophon 99 Berryeater, Black-headed 46 Berryeater, Hooded 156 Berrypecker, Obscure 199 bertha, Cyanophrys 102 BETHYLIDAE 251 betpakdalaensis, Selevinia 28 betsileanus, Ptychochromoides 86 betsileoensis, Astacoides 208 betsileoensis, Brachyuromys 143 Retta 88 Bettong, Brush-tailed 219 Bettong, Burrowing 219 Bettong, Eastern 219 Bettong, Northern 4 Bettong, Tasmanian 135, 219 Bettongia 4, 129, 135, 219 betulina, Sicista 143 betulonensis, Trochoidea 175 beuttikoferi quadrigutta, Eleuthemis bezoarticus bezoarticus, Ozotaceros bezoarticus celer, Ozotoceros 227 bezoarticus leucogaster, Ozotoceros bezoarticus, Ozotoceros 141 Bhutanitis 105, 208, 244 biaculeatus, Sygnathoides 205 biangulata, Georissa 209

biangulatus, Somatogyrus 211 Biatas 45 bibikoffi, Myrmica 101 Bibimys 143 bibroni, Pelochelys 66 bibronii, Pseudophryne 167 bicarinata, Archachatina 121 bicarinata, Bythinella 115 bicarinata, Discula 124 bicarinatus, Lanistes 113 bicolor bicolor, Saguinus 221 bicolor ssp., Gila 246 bicolor, Carelia 189 bicolor, Coracina 157 bicolor, Epalzeorhynchos 183 bicolor, Macropleurodus 85 bicolor, Rhyacornis 52 bicolor, Trichastoma 160 biconcava, Hirasea 214 biconica, Trichia 215 bicornis, Diceros 19 bicornis, Womersleymeria 250 biddulphi, Podoces 58 bidenatus, Muscocyclops 132 bidens, Mesoplodon 196 bidens, Rousettus 136 bidens, Sturnira 137 bidens, Vampyressa 137 bidentatus, Antichthonidris 100 bidentatus, Aphaenogaster 100 bidwilli, Papuexul 174 bidyanus, Bidyanus 83 Bidyanus 83 bielzii clathrata, Alopia 239 biemarginata, Dysnomia 187 biemarginata, Epioblasma 110 Bienkotetrix 109 bierzona, Helicella 126 bieti, Felis 195 bieti, Garrulax 50 bieti, Rhinopithecus 15 bifasciata, Saxicola 160 bifasciatus, Cyprinodon 243 bifurcatus, Stygobromus 89 bifurcus, Chiloglanis 76 Bighorn, Nelson's 229 Bighorn, Rimrock 229 bikolanus, Redigobius 169 bilamellata, Helenodiscus 189 Bilby 4 Bilby, Lesser 177 bilensis, Gerbillus 24 bilera, Ecclisomyia 255 bilineata, Partula 190 bilkis, Gazella 21 billakalina, Fonscochlea 116 biloba, Kimminsoperla 254 bimaculatus, Aglymbus 248 bindal, Euastacus 96 binghami, Notarthrinus 252 Binneya 213 binominata, Lampsilis 111 binturong whitei, Arctictis 224 Binturong, Palawan 224 biocellatus, Glossogobius 169 Biomphalaria 113, 173 biplicata, Lamellidea 120

bipunctata, Bryania 250 Bird-of-paradise, Blue 58 Bird-of-paradise, Emperor 164 Bird-of-paradise, Goldie's 58 Bird-of-paradise, Macgregor's 58 Bird-of-paradise, Red 164 Bird-of-paradise, Wilson's 164 Bird-of-paradise, Yellow-breasted 199 Birddrop, Insular 175 Birdwing, Chimaera 171 Birdwing, Paradise 244 Birdwing, Queen Alexandra's 105 Birdwing, Rothschild's 105 Birdwing, Talaud Black 105 Birgus 207 birmanicus, Lacconectus 248 bisaltide andamana, Doleschallia 253 biscaiense, Zospeum 113 Bischoffena 214 bischoffensis, Bischoffena 214 bisectus, Orconectes 94 bisetosus, Fibulacamptus 96 Bishop, Golden-backed 164 bishopi, Catharopeza 55 bishopi, Clyomys 28 bishopi, Moho 54 bishopi, Nesopupa 216 Bison, American 130 bison, Bison 130 Bison, European 20 Bison 20, 130 bispinosa, Boeckella 91 bispinosus, Euastacus 96 bistriata, Isothrix 146 bisulcus, Hippocamelus 20 Biswamayopterus 22 biswasi, Biswamayopterus 22 Bitis 62 bitorquatus, Rhinoptilus 37 bitridentata, Opanara 123 Bitterling, Itasenpara 71 Bitterling, Tokyo 74 Bittern, Australasian 31 Bittern, Black-backed 179 Bittern, Forest 147 Bittern, Schrenck's 147 Bitungu 73 BIVALVIA 110, 133, 172, 187, 209, 238, 244, 255 bivaricosus etheridgei, Placostylus 239 bivaricosus, Placostylus 126 bivexilla, Speleophria 97 bivittata, Buettikoferella 158 bizonatus, Sandracottus 249 Black-cockatoo, Glossy 40 Black-cockatoo, Slender-billed 40 Black-cockatoo, White-tailed 40 Black-tyrant, Hudson's 156 Blackbird, Forbes's 56 Blackbird, Jamaican 163 Blackbird, Saffron-cowled 56 Blackbird, Yellow-shouldered 56 Blackbuck 20 blackburni, Manduca 254 blackburni, Pentarthrum 185 Blackcap, Bush 159 blacki, Cambarellus 93

blacki, Orconectes 94

Blacksnake, St Vincent 61 blainvillei, Echimys 146 blainvillei, Pontoporia 196 blainvillii, Mormoops 137 blakei, Grallaria 155 blakistoni, Ketupa 42 Blanca, Dama Ciega 77 blanci, Chitala 167 blandingii, Emydoidea 165 Blanfordimys 143 blarina, Myosorex 7 Blarinella 136 Blarinomys 143 blasii, Rhinolophus 137 Blastocerus 20 **BLATTARIA 247** BLATTIDAE 247 Bleak, Danube 202 Bleak, Italian 71 Bleda 48 Bleeding-heart, Luzon 151 Bleeding-heart, Mindanao 39 Bleeding-heart, Mindoro 39 Bleeding-heart, Negros 39 Bleeding-heart, Sulu 39 bleheri, Chilatherina 78 BLENNIIDAE 206 Blenny, Tayrona 87 BLEPHAROCERIDAE 99 Blesbok 228 blewitti, Athene 42 blighi, Myiophonus 51 Blindcat, Toothless 75 Blindcat, Widemouth 75 Bloater 77 blofeldi, Chilonopsis 191 blombergi, Bulimulus 126 blossomae, Euploea 170 Blossomcrown 153 Blue, Alcon Large 170 Blue, Bohart's 252 Blue, Comstock's 252 Blue, Dusky Large 170 Blue, El Segundo 252 Blue, Greater Large 170 Blue, Higgin's Anomalous 103 Blue, Karner 252 Blue, Langston's 252 Blue, Large 170 Blue, Lotis 252 Blue, Mattoni's 252 Blue, Mission 252 Blue, Moro Bay 252 Blue, Naga Hedge 252 Blue, Palos Verdes 252 Blue, Pheres 252 Blue, Piedmont Anomalous 103 Blue, San Emigdio 252 Blue, Scarce Large 170, 252 Blue, Sierra Nevada 103 Blue, Smith's 252 Blue, Tailless 252 Blue, Texas Tailed 252 Blue, Wineland 170 Blue, Xerces 186 Blue-Eye, Cape 243 Blue-Eye, Forktail 243 Blue-eye, Glass 78

Blue-eye, Honey 78 Blue-Eye, Paska's 205 Blue-Eye, Popondetta 243 Blue-eye, Red-finned 79 Blue-flycatcher, Large-billed 158 Blue-flycatcher, Malaysian 158 Blue-flycatcher, Rueck's 50 Blue-flycatcher, White-bellied 158 Bluebuck 178 Bluetongue, Pygmy 61 blumenbachii, Crax 34 blythii, Tragopan 35 Boa, Bahamas 246 Boa, Cuban 165 Boa, Dumeril's 61 Boa, Jamaican 61 Boa, Madagascar 61 Boa, Madagascar Tree 61 Boa, Mona Island 234 Boa, Puerto Rican 165 Boa, Round Island 182 Boa, Round Island Keel-scaled 61 Boa, Rubber 246 Boa, Virgin Islands 234 boanensis, Monarcha 51 bobak, Marmota 131 bobrinskoi, Eptesicus 138 bocagei, Bostrychia 31 bocagii, Amaurocichla 49 bocagrande, Cyprinella 71 Bocagrande, Sardinita 71 Bocon, Guayacon 80 bocourti, Phoboscincus 200 bodenheimeri, Pipistrellus 139 Boeckella 91 boehlkei, Elassoma 169 boesemani, Melanotaenia 78 boettgeri, Pronesopupa 216 Boettgeria 123 bofilliana, Montserratina 174 Bofilliella 123 Boga-Portuguesa 71 bogalusensis, Skistodiaptomus 207 bogdanovi, Dinaromys 143 Bogidiella 89 **BOGIDIELLIDAE 89** BOIDAE 61, 165, 182, 234, 246 boitonei, Cynolebias 79 bojerii fontenayi, Gongylomorphus 246 bojnicensis, Belgrandiella 115 bokermanni, Lonchophylla 11 Bolborhynchus 40 bolei, Monolistra 97 boliviensis, Abrocoma 28 bollii, Columba 38 bollonsi, Placostylus 121 Boloria 104 Bolson, Perrito del 243 boltoni, Aethopyga 161 Bolyeria 182 bombina, Bombina 132 Bombina 132 bombinus, Myotis 138 bombus, Acestrura 43 Bombycilla 157 **BOMBYCILLIDAE 157** bomolensis, Gulella 216

bonaeriensis, Phyllotis 144 bonana, Icterus 56 bonarensis, Balaenoptera 129 Bonasa 149 bonasia, Aphanapteryx 180 bonasus, Bison 20 Bongo 141 Bongo, Eastern 230 Bongo, Westen 230 bonhatei, Gerbillus 24 bonillai, Arius 76 Boninagrion 106 Boninena 121 boninensis, Gastrocopta 127 boninensis, Indolestes 107 boninensis, Liardetia 124 Baninosuccinea 128 Baninthemis 107 bonita, Priapella 184 bonnali, Lacerta 60 bonnevillensis, Stagnicola 113 bontanus, Rattus 26 Bontebok 130, 228 banthaina, Ficedula 50 bonti Telmatherina 243 Bonytongue, Asian 70 Boobook, Sumba 42 Booby, Abbott's 30 Boodie 4, 219 boonsongi, Parahelicops 200 boops, Harpagochromis 184 boraborensis, Mautodontha 123 boraxobius, Gila 72 borbanensis, Hippocampus 81 Borbonibis 179 borbonica mauritiana, Antanartia 253 borbonica, Antanartia 253 barbanica, Cylindraspis 182 barbanicus, Scotophilus 13 bordaensis, Glyptorhagada 122 barealis, Balaenoptera 18 borealis, Lissadelphis 242 borealis, Numenius 37 borealis, Picoides 45 boreas, Bufo 66 borneensis, Orlitia 166 borneoensis, Callagur 64 bornmuelleri, Vipera 62 Boroda 87 Boromys 178 borysthenicus, Leuciscus 202 Bos 20 boschungi, Etheostoma 83 boscoi, Ponticyclops 132 Boselaphus 130 Bastrichthys 206 Bostrychia 31 Botaurus 31 Bothriembryon 256 Bothriembryon 121, 256 Bothrops 62 Botia 74 Boto 19 botswanae, Laephotis 138 bottae umbratica, Charina 246 bottegoides, Crocidura 6

Boubou, Turati's 157

baucardi, Amazilia 43 bouchardi, Cambarus 93 baueti, Typhlasynbranchus 205 bougainville bougainville, Perameles bougainville fasciata, Perameles 219 bougainville, Melomys 144 bougainville, Perameles 4 bougainvillei, Actenoides 44 bourguignati, Gonospira 175 bourguignati, Paladilhiopis 116 bourguignatiana, Renea 113 bournianum, Pleurobema 111 bousfieldi, Gammarus 90 bovi, Fissuria 116 BOVIDAE 20, 130, 141, 178, 227, 242, 245 bovinus, Cyprinodon 79 bawdoini, Mesoplodon 196 Bowerbird, Archbold's 58 Bowerbird, Fire-maned 58 Bowerbird, Golden 132 Bowerbird, Golden-fronted 164 boweri, Colluricincla 158 Bawkeria 252 bowmani, Stygabromus 89 bowryensis, Beddomeia 114 Boxeador, Cachorrito 80 boyciana, Ciconia 31 boyeri, Atherina 204 boykiniana, Elimia 117 braccatus, Moho 54 bracei, Chlorostilbon 181 **BRACHIONICHTHYIDAE 78** Brachianichthys 78 brachycephala, Myonycteris 9 Brachycercus 250 brachycerus, Thestor 170 Brachygalaxias 204 Brachylagus 146 brachylopha, Lophornis 43 Brachylophus 59 Brachyphylla 137 Brachypteracias 44 brachypterus, Dasyornis 50 Brachypteryx 50, 158 Brachyramphus 150 brachyrhynchus, Hippocampus 81 Brachyteles 14 Brachythemis 107 brachyura, Hystrix 28 Brachyuramys 143 brachyurus, Accipiter 32 brachyurus, Crysocyon 140 brachyurus, Ramphocinclus 49 brachyurus, Setonix 4 Bracken-warbler, Cameroon 158 bracteata, Lampsilis 172 bradei, Holoaden 67 bradshaweri, Bothriembryon 121 BRADYBAENIDAE 121, 213, 239 BRADYPODIDAE 5 Bradypodion 59, 164, 165 Bradypterus 50, 158, 198 Bradypus 5 Branchinecta 91, 244 BRANCHINECTIDAE 91, 244

Branchinella 91 **BRANCHIPODIDAE 91** brandti, Barbatula 203 branickii, Dinomys 28 branickii, Leptosittaca 41 Branta 32 brasilensis, Caecorhamdella 204 brasiliana, Cercomacra 155 brasiliensis, Amazona 40 brasiliensis, Pteronura 17 brasiliensis, Tadarida 139 brassi, Philemon 199 braueri, Antipodochlora 171 braunei, Benthophiloides 206 brauni, Laniarius 48 brazieri, Bathriembryon 121 brazieri, Ostodes 212 Brazieria 217 brazoriensis, Procambarus 94 bredanensis, Steno 196 bregullae, Chaerephon 139 brehmii, Monarcha 51 brelichi, Rhinopithecus 15 brenchleyi, Ducula 39 brenchleyi, Pupina 212 Brennania 99 bressanum, Bythiospeum 244 brevibarbus, Ancharius 203 brevicauda ishigakiana, Bayadera 238 brevicaudata, Chinchilla 28 brevicaudata, Micragale 241 brevicaudatus, Onchotelson 97 breviceps, Blarinomys 143 breviceps, Hippocampus 205 breviceps, Hipposideros 10 breviceps, Kogia 242 breviceps, Polyergus 101 Breviceps 67 brevicincta, Somatochlora 106 brevicornis, Baronia 171 brevidens, Dysnomia 255 brevidens, Epioblasma 110 brevipalmata, Litoria 166 brevipennis, Acrocephalus 49 brevipennis, Vireo 163 brevipes, Aratinga 40 brevipinnis, Barbus 71 brevipinnis, Torguigener 207 brevirostris, Chasmistes 75 brevirostris, Orcaella 195 brevirostris, Rissa 38 brevirostrum, Acipenser 70 brevis, Adelotus 167 brevis, Avenionia 211 brevis, Chetia 84 brevis, Elimia 117 brevistigmata okinawanus, Chlorogomphus 237 breweri, Antrobia 256 breweri, Antrorbis 114 breweri, Microtus 242 brewsteri, Siphonorhis 153 breyeri, Tetradactylus 59 Briána 71 briansmithi, Beddomeia 114 briarea, Anetia 170 Bridouxiana 119

bridwelli, Nesithmysus 248 bridwelli, Nesosydne 251 Brilliant, Pink-throated 153 Bristle-tyrant, Antioquia 47 Bristle-tyrant, Southern 156 Bristle-tyrant, Venezuelan 156 Bristlebill, Green-tailed 48 Bristlebird, Eastern 50 Bristlebird, Rufous 50 Bristlebird, Western 50 Bristlefront, Slaty 155 Bristlefront, Stresemann's 46 Bristlehead, Bornean 157 Bristletail, Hawaiian Long-palp 254 Bristletail, Perkin's Club-palp254 broadbenti, Dasyornis 50 broadbenti, Peroryctes 193 Broadbill, African Green 45 Broadbill, Wattled 45 broadlevi, Pelusios 65 brochus, Syntheosciurus 142 brocki, Vampyressa 11 bromeliarum, Aglymbus 248 Bronze-cuckoo, Green-cheeked 198 Bronzewing, Flock 151 Bronzewing, New Britain 151 Bronzewing, New Guinea 151 brookei, Sundasciurus 142 Brookesia 59 brooksi tearei, Poecilmitis 252 brooksi, Delanymys 242 Brotogeris 152 Brotomys 178 broughami, Cupedora 173 Brown, Dickson's 253 Brown-dove, Dark-eared 39 brownae, Astatotilapia 84 browni, Bulinus 173 browni, Microcylloepus 249 browni, Monarcha 159 browni, Optioservus 249 brownii, Geocapromys 28 brownii, Thylogale 4 brucei, Campellolebias 79 bruchi, Oxyepoecus 101 bruijni, Pogonomelomys 26 bruijni, Zaglossus 3 bruijnii, Aepypodius 34 bruijnii, Epimachus 164 brumbacki, Aotus 14 brumbyi, Pleurocera 118 bruneauensis, Pyrgulopsis 211 brunei, Tryonia 212 brunii, Thylogale 4 brunnea, Hyaena 241 brunnea, Merycomyia 250 brunneata, Rhinomyias 52 brunneicapilla, Aplonis 57 brunnescens, Dubiraphia 249 brunnescens, Macaca 15 brunneus brunneus, Chlorogomphus brunneus brunneus, Spermophilus 231 brunneus endemicus, Spermophilus 231 brunneus keramensis, Chlorogomphus

brunneus, Chalepoxenus 100

brunneus, Dromaeocercus 158 brunneus, Eptesicus 138 brunneus, Paradoxornis 160 brunneus, Pteropus 177 brunneus, Speirops 53 brunneus, Spermophilus 22 brunnipennis floridana, Photuris 249 brunnotesselata, Trigonoscuta 248 brunus, Hydromantes 68 Brush-finch, Dusky-headed 162 Brush-finch, Pale-headed 54 Brush-finch, Rufous-eared 162 Brush-finch, White-rimmed 162 Brush-finch, Yellow-headed 54 Brush-turkey, Bruijn's 34 Brush-warbler, Moheli 159 bryani, Oceanides 251 bryani, Rhyncogonus 185 Bryania 250 bryantae, Philodice 153 bryanti, Neotoma 25 Brychius 249 bubalis, Bubalus 20 Bubalus 20 Bubo 42, 152 bubulum, Cristilabrum 121 buccinator, Cygnus 147 BUCCINIDAE 173, 213 Bucco 154 **BUCCONIDAE 154** buccula, Notropis 73 bucculentus, Sus 178 Ruceros 154 **BUCEROTIDAE 44, 154** bucharicus, Blanfordimys 143 buckleyi, Micrastur 242 buddii, Achatinella 188 Budorcas 21, 227 buergersi, Erythrotriorchis 198 Buettikoferella 158 buettikoferi, Epomops 8 buettikoferi, Nectarinia 242 buettneri, Leimacomys 24 Buffalo, African 131 Buffalo, Wild Water 20 Buffetia 125 Bufo 66, 166, 201 BUFONIDAE 66, 166, 201 Bug, Amargosa 251 Bug, Ana Wingless Thread 251 Bug, Annectans 251 Bug, Ash Meadows 251 Bug, Bryan's Seed 251 Bug, Dry Creek Cliff Strider 251 Bug, French Frigate Shoal Seed 251 Bug, Hawaiian 251 Bug, Kauai Band-legged Seed 251 Bug, Lanai Leaf 251 Bug, Mauna Loa Seed 251 Bug, Mirid Leaf 251 Bug, Mount Haleakala Seed 251 Bug, Mount Tantalus Wingless Thread Bug, Necker Bunchgrass Seed 251 Bug, Necker Goosefoot Seed 251 Bug, Nihoae Seed 251 Bug, Perkin's Oceanides Seed 251 Bug, Pulchrus Thread 251

Bug, Robert's Wingless Thread 251 Bug, Rough-headed Seed 251 Bug, Saratoga Springs 250 Bug, Selium Wingless Thread 251 Bug, Smith's Reduviid 251 Bug, Villosan Flightless Seed 251 buhleri, Coryphomys 178 bulbicercus, Nanodectes 109 Bulbul, Blue-wattled 198 Bulbul, Grey-headed 157 Bulbul, Hook-billed 157 Bulbul, Mauritius 48 Bulbul, Nicobar 48 Bulbul, Spot-necked 48 Bulbul, Straw-headed 48 Bulbul, Streak-breasted 48 Bulbul, Styan's 157 Bulbul, Yellow-eared 157 Bulbul, Yellow-throated 157 Bulbul, Yellowish 157 bulenta, Problema 252 bulgardaghica, Vipera 62 Bulha, Mojarra de 236 bulimoides rosea, Achatinella 238 bulimoides, Achatinella 120 BULIMULIDAE 121, 133, 239, 244 Bulimulus 126, 215 Bulinus 113, 173 bulla, Ningbingia 122 bullaris, Tylomys 27 bullata, Allactaga 142 bullatus, Peromyscus 26 bulleri, Diomedea 146 bulleri, Puffinus 146 Bullfinch, Orange 163 Bullfinch, White-cheeked 163 bullocki, Brachygalaxias 204 bullocki, Telmatobufo 201 Bullockia 204 Bully, Tarndale 87 bulmerae, Aproteles 8 bulolo, Chilatherina 204 bulweri, Discula 124 bulweri, Lophura 35 bungaroides, Hoplocephalus 62 Bungu, Poso 87 bunkeri, Neotoma 25 bunnii, Nesokia 144 Bunolagus 28 Bunomys 23, 143 Bunting, Cinereous 162 Bunting, Gough 55 Bunting, Grosbeak 55 Bunting, Ochre-rumped 162 Bunting, Rose-bellied 162 Bunting, Rufous-backed 54 Bunting, Slaty 162 Bunting, Socotra 55 Bunting, Tibetan 162 Bunting, Tristan 55 Bunting, Yellow 55 Buntingi 80 Buntingi, Black 80 Buntingi, Duck-billed 80 Buntingi, Egg-carrying 81 Buntingi, Popta's 81 **BUPRESTIDAE 98** Buprestis 98

buraensis, Thapsia 125 burbidgei, Petrogale 135 burchellanus, Parides 171 burchelli, Aplothorax 248 burchelli, Pseudobarbus 73 burdigala, Betta 88 burduricus, Aphanius 79 burduricus, Arctodiaptomus 91 bureschi, Barbatula 203 burgi, Pseudobarbus 73 Burmagomphus 107 burnelli, Acneus 249 burnesii, Prinia 52 burni, Victodrobia 117 burnieri, Ploceus 57 burra, Certhilauda 47 BURRAMYIDAE 4, 220 Burramys 4 burrisi, Fallicambarus 94 Burrower, Piedmont Blue 93 burrowsius, Neochanna 77 burrus. Rattus 26 burtoni, Bathygobius 206 burtoni, Gerbillus 24 burtoni, Percina 84 buruensis, Platynectes 249 burundensis, Tropodiaptomus 92 buryi, Sylvia 52 buryillum, Cristilabrum 121 busbyi, Paryphanta 175 buschingeri, Leptothorax 100 busckana, Carolella 252 buselaphus buselaphus, Alcelaphus 227 buselaphus caama, Alcelaphus 227 buselaphus cokei, Alcelaphus 227 buselaphus lelwel, Alcelaphus 227 buselaphus major, Alcelaphus 227 buselaphus swaynei, Alcelaphus 227 buselaphus tora, Alcelaphus 227 buselaphus, Alcelaphus 130 Bush-crow, Ethiopian 58 Bush-quail, Manipur 35 Bush-robin, Rufous-breasted 160 Bush-shrike, Bulo Burti 48 Bush-shrike, Gabela 48 Bush-shrike, Green-breasted 48 Bush-shrike, Lagden's 157 Bush-shrike, Monteiro's 49 Bush-shrike, Mount Kupe 49 Bush-shrike, Orange-breasted 48 Bush-shrike, Uluguru 48 Bush-tanager, Yellow-green 54 Bush-tyrant, Rufous-bellied 156 Bush-tyrant, Santa Marta 47 Bush-warbler, Aldabra 181 Bush-warbler, Long-billed 50 Bush-warbler, Long-tailed 158 Bush-warbler, Sri Lanka 158 Bush-warbler, Tanimbar 158 Bushbird, Recurve-billed 45 Bushbird, Rondônia 198 Bushchat, Jerdon's 160 Bushchat, White-bellied 160 Bushchat, White-browed 52 Bushchat, White-throated 52 bustamantei, Evarra 183 Bustard, Blue 150

Bustard, Great 37 Bustard, Great Indian 37 Bustard, Houbara 242 Bustard, Little 150 Bustard, Little Brown 150 Bustard, Nubian 150 Butastur 148 Butcherbird, Tagula 199 Buteo 33, 148 Buthraupis 54 butis, Butis 169 Butis 169 butleri, Accipiter 147 butleri, Sminthopsis 4 Butterfly, Andrew's Marble 253 Butterfly, Bay Checkerspot 253 Butterfly, Miami Blue 252 Butterfly, Mitchell's Satyr 253 Butterfly, Mono Checkerspot 253 Butterfly, Smokey Eyed Brown 253 Butterfly, Tawny Crescent 253 Butterfly, Uncompangre Fritillary 104 Butterflyfish, Easter Island 84 Butterflyfish, Marley's 84 Butterflyfish, Yellow-crowned 84 Buttonquail, Black-breasted 35 Buttonquail, Buff-breasted 35 Buttonquail, Chestnut-backed35 Buttonquail, Spotted 149 Buttonquail, Sumba 35 Buttonquail, Worcester's 35 buxtoni, Tragelaphus 22 Buzzard, Rufous-winged 148 byrnei, Dasycercus 3 byronii, Achatinella 120 Bythinella 115, 173, 188, 244 Bythiospeum 115, 173, 211, 244 BYTHITIDAE 77, 204, 247 bythobathes, Tilapia 86 cabanisi, Tangara 55 Cabassous 136, 193 Cabezon, Cachorrito 79 caboti, Tragopan 35 cabrerae, Microtus 144 Cacajao 14, 221, 241 Cacatua 40, 152 cachinnans, Garrulax 159 Cacicus 56 Cacique, Selva 56 Caco, Cape 167 Caco, Poynton's 201 Cacomantis 198 Caconemobius 108 Cacosternum 167, 201 cactorum, Asthenes 155 cacuminis, Leptoperla 109 Caddisfly, Alexander's 255 Caddisfly, Alsea Micro 254 Caddisfly, Arkansas 254 Caddisfly, Artesian 254 Caddisfly, Athens 187 Caddisfly, Bilobed 255 Caddisfly, Blue Mountains 255 Caddisfly, Cascades 255 Caddisfly, Castle Crags 255 Caddisfly, Castle Lake 187 Caddisfly, Clatsop 255 Caddisfly, Colombian Gorge 255

Caddisfly, Contorted Micro 254 Caddisfly, Denning's 254 Caddisfly, Deschutes Micro 254 Caddisfly, Fender's 255 Caddisfly, Fischer's 254 Caddisfly, Florida Longhorn 254 Caddisfly, Florida Micro 254 Caddisfly, Fort Dick 255 Caddisfly, Goeden's 254 Caddisfly, Green Springs Mountain 255 Caddisfly, Haddock's 255 Caddisfly, Kiamath 255 Caddisfly, King's Creek 255 Caddisfly, Kings Canyon 255 Caddisfly, Kite's Micro 254 Caddisfly, Knoxville Micro 254 Caddisfly, Little Longhorn 254 Caddisfly, Missouri 255 Caddisfly, Mount Hood 255 Caddisfly, Obrien 255 Caddisfly, One-spot 255 Caddisfly, Oregon 255 Caddisfly, Provost's Micro 254 Caddisfly, San Marcos 254 Caddisfly, Spiny 255 Caddisfly, Three-tooth 187 Caddisfly, Tobias' 187 Caddisfly, Tombstone Prairie 255 Caddisfly, Vertree's 254 Caddisfly, Vertree's Micro 254 Caddisfly, Zigzag Blackwater 255 caddoensis. Plethodon 167 cadenati, Entomacrodus 206 cadornae, Pipistrellus 139 Caecidotea 96, 97 caecilia, Strongylognathus 102 Caecobarbus 71 Caecocypris 71 Caecorhamdella 204 caelata, Trichia 215 caelatura, Plegma 124 CAENIDAE 250 CAENOLESTIDAE 3 caerulatus, Cyornis 158 caerulea, Cyprinella 71 caerulea, Pitta 156 caeruleirostris, Loxops 56 caeruleostigmata, Chela 71 caerulescens, Eupodotis 150 caerulescens, Porphyrospiza 163 caeruleus, Cyanocorax 164 caesia, Achatinella 188 caespes, Euploea 104 caffer, Acrocephalus 49 caffer, Syncerus 131 caglei, Graptemys 64 cahabae, Notropis 73 cahabensis, Clappia 115 cahabensis, Homoeoneuria 250 cahawbensis, Elimia 212 cahita, Catostomus 75 Cahita, Matalote 75 cahni, Erimystax 72 cahow, Pterodroma 30 cahuilaensis, Stenopelmatus 109 caiguanabus, Papilio 208 Caiman, Black 58 Cairina 32

Cairnsichthys 78 caissara, Leontopithecus 14 calabarensis, Arctocebus 139 calabyi, Thylogale 4 Calamaria 200 calamianensis, Axis 20 Calamoecia 91 CALANOIDA 91, 185, 207 calcaris, Boeckella 91 Calcochloris 241 Calconiscellus 97 calculus, Caseolus 124 caldeirarum, Leptaxis 125 Caldera, Charal de la 78 calderoni, Cobitis 74 caldwelli, Astacoides 208 caldwelli, Ctenophila 124 Caldwellia 124, 190 caledoni, Aloeides 102 caliculata, Opanara 123 calida calida, Stenelmis 249 calida moapa, Stenelmis 249 calida, Paracoenia 250 calidus, Barbus 71 californensis, Anodonta 255 californianus japonicus, Zalophus 224 californianus wollebaeki, Zalophus 224 californianus, Gymnogyps 32 californicus dimorphus, Desmocerus 248 californicus femoralis, Chaetodipus 231 californicus mohavensis, Microtus 232 californicus scirpensis, Microtus 232 californicus stephensi, Microtus 232 . californicus, Macrotus 11 californiense, Ambystoma 68 californiensis, Hesperodiaptomus 92 caligata sheldoni, Marmota 230 caligata vigilis, Marmota 230 caliginca, Crocidura 6 Callaeas 58 CALLAEIDAE 58, 132, 182 Callagur 64 callathiscus, Leiostyla 127 Callicebus 14, 194, 221, 241 callifera, Partula 190 Callimico 14 **CALLIONYMIDAE 87** Callionymus 87 callipeplum, Chondropoma 212 callippe callippe, Speyeria 253 calliptera, Pyrrhura 41 callipygus, Cephalophus 141 callistoderma, Boninena 121 callistoderma, Helminthoglypta 125 callitaenia, Cyprinella 167 Callithrix 14, 194, 241 CALLITRICHIDAE 14, 194, 221, 241 callizonus, Jokajdon 214 callizonus, Xenotriccus 156 Callophrys 252 Callopistes 200 Callorhinus 17 Callosciurus 22 callotis, Lepus 146

Caloenas 150

Calomyscus 23, 143

calonotus, Simoselaps 165 Caloprymnus 177 CALOPTERYGIDAE 106, 171, 237 Calopteryx 106, 171 calopyge, Monolistra 97 Calates 59 calura, Phascogale 3 Caluromys 3, 135 Caluromysiops 3 calva, Lemniscia 133 calverti, Somatochlora 171 calvus calvus, Cacajao 221 calvus novaesi, Cacajao 221 calvus rubicundus, Cacajao 221 calvus ucayalii, Cacajao 221 calvus, Bulimulus 126 calvus, Cacajao 14 calvus, Geronticus 31 calvus, Sarcogyps 148 calypso, Partula 127 Calyptophilus 54 Calyptorhynchus 40 Calyptura, Kinglet 46 Calyptura 46 CAMAENIDAE 121, 173, 189, 214, 239, 244, 256 Camarhynchus 54, 162 Cambarellus 93 CAMBARIDAE 93, 237 Cambarus 93, 94 cambodiana, Arborophila 34 Camel, Wild Bactrian 20 CAMELIDAE 20, 130, 226 camelopardalis, Giraffa 130 camelopardalis, Hippocampus 81 camelus, Epigomphus 107 Camelus 20 camensis, Beddomeia 114 cameroni, Colophon 99 camerunense, Enallagma 106 camerunensis, Bulinus 113 camerunensis, Francolinus 34 camerunensis, Hipposideros 136 campaneri, Canthocamptus 132 campani, Furcifer 59 campbelli, Advena 190 campbelli, Malurus 198 campbelli, Mussonena 122 campbelli, Phalacrocorax 31 Campellolebias 79 Campeloma 120 Campephaga 48 CAMPEPHAGIDAE 48, 157, 242 Campephilus 44, 181 campestris, Caloprymnus 177 campestris, Metacyclops 132 Campethera 154 campi, Batrachoseps 68 campioni, Allorhizucha 107 Campolaemus 192 Camponotus 100 camposensis, Diplomystes 203 Campsicnemus 185 Camptoceras 210 Camptorhynchus 179 Campylopterus 43, 153 Campylorhamphus 155

cana, Vulpes 195 canadensis californiana, Ovis 229 canadensis cremnobates, Ovis 229 canadensis frondator, Castor 245 canadensis mexicana, Ovis 229 canadensis mexicanus, Castor 245 canadensis nelsoni, Ovis 229 canadensis phaeus, Castor 231 canadensis weemsi, Ovis 229 canadensis, Harpagoxenus 100 canadensis, Ovis 131 canaliculata, Newcombia 120 canalis, Sinployea 189 Canariella 133 canariensis, Crocidura 6 canariensis, Potamonectes 249 Canariomys 178 Canary, Protea 163 Canastero, Austral 45 Canastero, Berlepsch's 45 Canastero, Cactus 155 Canastero, Chestnut 45 Canastero, Cip3/4 45 Canastero, Line-fronted 155 Canastero, Maquis 45 Canastero, Pale-tailed 45 cancellata, Prosobonia 38 candango, Juscelinomys 143 candezei, Amychus 249 candicans, Caprimulgus 43 candida, Partula 190 Candidula 126 candidum, Ophisternon 205 CANDONIIDAE 185 canescens, Bulinus 173 canescens, Marmosa 193 canescens, Pseudocheirus 193 canestrini, Pomatoschistus 206 Cangrejero, Cachorrito 79 caniceps, Diplomys 146 caniceps, Geotrygon 151 caniceps, Peromyscus 26 caniceps, Psittacula 152 CANIDAE 16, 129, 140, 177, 195, 223, canifrons, Gallicolumba 151 caninus, Barbus 167 Canis 16, 223, 241 cannfluviatilus, Oreomava 214 canningi, Rallina 37 canorus, Bufo 66 cansulus, Sorex 7 cansus morosa, Ochotona 233 cansus sorella, Ochotona 233 cantans, Telespiza 56 cantator, Phylloscopus 160 Canthigaster 88 CANTHOCAMPTIDAE 96, 132, 208 Canthocamptus 96, 132 cantonensis, Pericrocotus 157 cantarii, Pelochelys 66 canus, Eropeplus 24 canus, Optioservus 249 canuti, Rhinolophus 137 capaccinii, Myotis 12 capax, Potamilus 112 capellei, Treron 151

capense, Cacosternum 167 Capensibufo 166 capensis, Barbus 71 capensis, Beddomeia 114 capensis, Hippocampus 81 capensis, Metadiaptomus 92 capensis, Microbatrachella 67 capensis, Morus 146 capensis, Myxus 244 capensis, Pedetes 27 capensis, Rhinolophus 10 capensis, Turnagra 181 Caperea 242 capillaris, Elimia 117 capitalis, Aphanotriccus 156 capitalis, Stachyris 160 Capito 44, 154 CAPITONIDAE 44, 154 Capnia 254 CAPNIIDAE 254 capnodes, Otus 42 Capoeta 167, 202 caporaphe, Iredaleoconcha 125 Capra 21, 141, 228 capreolus, Pelea 131 capricorni, Tornelasmias 188 Capricornis 21, 130, 228 CAPRIMULGIDAE 43, 153, 198 CAPRIMULGIFORMES 43, 153, 198 Caprimulgus 43, 153, 198 Caprolagus 28 CAPROMYIDAE 28, 146, 178 Capromys 178 capsaeformis, Dysnomia 255 capsaeformis, Epioblasma 110 Capshell, Rocky Mountain 112 capsula, Ogasawarana 209 captivus, Xenoophorus 80 Capuchin, Andean White-fronted 222 Capuchin, Robust Tufted 222 Capuchin, White-fronted 222 capucinus curtus, Cebus 222 Capys 102 CARABIDAE 98, 169, 185, 248 Carabus 98, 169 Caracara, Guadalupe 179 Caracara, Striated 149 Caracolera, Mojarra 85 caramba, Paludiscala 116 carassius, Carassius 236 Carassius 236 carbonaria, Cercomacra 45 Carbonera, Perrito de 79 carcassoni, Mylothris 253 CARCHARHINIDAE 69 Carcharhinus 69 carcharias, Carcharodon 69 Carcharias 69 CARCHARINIFORMES 69 Carcharodon 69 Carcinoscorpius 209 Cardinal, Yellow 55 Cardiocondyla 100 Cardiocranius 23 Cardioderma 136 cardium, Lampsilis 172 cardonai, Myioborus 56

cardosoi, Megalolulimus 190 Carduelis 56, 163 Carelia 189 caretta, Caretta 62 Caretta 62 CARETTOCHELYIDAE 62 Carettochelys 62 caribaea, Columba 38 caribaeus, Vireo 56 caribbaea, Pterodroma 30 Caribou, Peary 227 cariei, Typhlops 182 cariei, Unio 187 carinata bartschi, Cyclura 234 carinata carinata, Cyclura 234 carinata, Deinacrida 254 carinata, Cyclura 59 carinata, Lantzia 113 carinata, Tropidophora 212 carinatum, Electron 154 carinatus, Neoplanorbis 113 carinella, Perdicella 213 carinofausta, Actinella 174 Carinotrachia 121 carinulata, Bythinella 173 Carinurella 90 cariosa, Lampsilis 111 carlhubbsi, Mesoplodon 196 carnarvonensis, Jardinella 116 CARNIVORA 16, 129, 140, 177, 195, 223, 241, 245 carola, Ducula 39 Carolella 252 caroli, Polyonymus 153 caroli, Pseudochirulus 193 caroli, Sarotherodon 86 carolina, Terrapene 166 carolinae, Cettia 158 carolinae, Syconycteris 10 carolinae, Trochomorpha 217 carolinarum, Sturanyella 209 carolinensis, Conuropsis 180 carolinensis, Omphalotropis 210 carolinensis, Papilio 105 carolinensis, Skistodiaptomus 92 carolitertii, Leuciscus 243 carolynnae, Aloeides 102 Carp, Crucian 236 Carp, Wild Common 202, 236 carpio, Cyprinus 236 carpio, Cyprinus 202 carpio, Salmo 77 Carpococcyx 42, 152 Carpodacus 199 Carpodectes 46, 156 Carpomys 197 Carpornis 46, 156 CARPOSINIDAE 252 carrikeri, Geotrygon 39 carrikeri, Tonatia 11 carruai, Diploglossus 59 carruthersi, Funisciurus 22 carsoniana, Carinotrachia 121 carteri, Westralunio 110 Carterodon 145 cartilaginea, Amyda 65 cartilagonodus, Otopteropus 9

carunculata, Paradigalla 164 carunculatus, Grus 36 carunculatus, Phalacrocorax 31 carunculatus, Philesturnus 132 Carunculina 255 CARYCHIIDAE 113 CARYODIDAE 123 caryophyllacea, Rhodonessa 32 Casarea 61 cascadae, Rana 67 Case, Spectacle 255 Caseolus 256 Caseolus 124, 133, 256 Casinycters 136 caspica, Phoca 17 cassida, Leiostyla 127 cassini, Gymnostinops 56 cassini, Magicicada 170 cassius, Psammochromis 185 cassoni, Colophon 99 Cassowary, Dwarf 146 Cassowary, Northern 29 Cassowary, Southern 29 casta, Achatinella 188 Castalia 110 castanea, Auriculella 213 castanea, Litoria 243 castanea, Partula 190 castanea, Pithys 198 castaneae, Ectodemia 186 castaneae, Synanthedon 254 castaneela, Argyresthia 186 castaneiventris, Amazilia 43 castaneus, Lasiurus 12 castanonotum, Glaucidium 152 castanota, Turnix 35 castor, Pyrgulopsis 211 Castor 142, 231, 245 CASTORIDAE 142, 231, 245 castroviejoi, Lepus 28 castus, Monarcha 159 CASUARIIDAE 29, 146 CASUARIIFORMES 29, 146, 179 casuarius, Casuarius 29 Casuarius 29, 146 Cat, African Golden 241 Cat, Andean 16 Cat, Asiatic Golden 140 Cat, Bay 16 Cat, Chinese Desert 195 Cat, Fishing 140 Cat, Flat-headed 16 Cat, Iriomote 224 Cat, Little Spotted 140 Cat, Marbled 195 Cat, Pakistan Sand 223 Cat, Pallas's 241 Cat, Pampas 241 Cat, Rusty-spotted 195 Cat, Sand 241 Catabasis 203 catagius, Cambarus 93 Cataglyphis 100 Catagonus 20 catamene, Loriculus 41 Catamenia 162 cataphractus, Cordylus 59

cataphractus, Crocodylus 199 cataractae ssp., Rhinichthys 246 cataractae, Puntius 203 catax, Eriogaster 208 Catbird, Black 158 Catbird, Tooth-billed 164 Catfish, Aristotle's 203 Catfish, Cave 76 Catfish, Dalhousie 247 Catfish, False Spine 247 Catfish, Froggatt's 204 Catfish, Giant 76, 203 Catfish, Lorentz 204 Catfish, New Grenada Sea 76 Catfish, Taylor's 204 Catharopeza 55 CATHARTIDAE 32 catherina, Gyliotrachela 175 catherinae, Melanotaenia 243 Catinella 175 Catocala 253 catodon, Physeter 18 Catopuma 16, 140 CATOSTOMIDAE 75, 168, 183, 203, catostomus lacustris, Catostomus 246 Catostomus 75, 168, 246 Catreus 34 Catspaw 255 Catspaw, Narrow 187 Catspaw, White 255 catta, Lemur 14 caucasica, Capra 21 caucasica, Mertensiella 167 caucensis, Rhipidomys 145 caudacuta, Culicivora 156 caudalis, Leucorrhinia 244 CAUDATA 68, 132, 167, 201, 235, 246 caudata, Marmota 142 caudata, Sicista 23 caudatus caudatus, Naemorhedus 229 caudatus evansi, Naemorhedus 229 caudatus griseus, Naemorhedus 229 caudatus macrurus, Cercartetus 220 caudatus raddeanus, Naemorhedus 229 caudatus, Bradypterus 158 caudatus, Naemorhedus 21 caudatus, Spelaeornis 52 caudiverbera, Caudiverbera 201 Caudiverbera 201 caudocarinatus, Microphis 205 caudovittatus, Tetracentrum 206 Cauque 168 caurinus, Eptesicus 138 caurinus, Notoryctes 4 cavagnaroi, Bulimulus 126 Cavaticovelia 251 cavaticus, Echinodillo 208 Cave-chat, Angola 161 Cavefish, Alabama 77 Cavefish, Northern 77 Cavefish, Ozark 77 cavernicola, Aspiduchus 247 cavernicola, Clarias 76 cavernicola, Eleutherodactylus 67 cavernicola, Spelungula 207 cavernicolus, Atlantasellus 97

Cavesnail, Greenbrier 116 Cavesnail, Mimic 116 Cavesnail, Phantom 115 Cavesnail, Tapered 211 Cavesnail, Tunibling Creek 114 cavicauda, Thermosphaeroma 97 cavicola, Pseudocandona 98 cavicola, Thaumatogryllus 108 cavifrons, Ambloplites 83 cavifrons, Harpagochromis 184 CAVIIDAE 145 cavirostris, Ziphius 197 cawstoni, Tomicha 188 cazieri, Cicindela 248 cazorlensis, Potamonectes 249 CEBIDAE 14, 194, 221, 241 cebifrons, Sus 20 cebuensis, Copsychus 50 Cebus 15, 221, 222 cecconii, Strongylognathus 102 cecilia, Ophiogomphus 244 ceciliae, Cyprinodon 183 ceciliae, Phylloscartes 47 Cecilioides 124, 215 cedista, Partula 190 celaeno, Nyctimene 9 Celaenomys 143 celaenops, Turdus 53 celebensis, Acerodon 136 celebensis, Crunomys 23 celebensis, Miratesta 187 celebensis, Nomoramphus 205 celebensis, Oryzias 80 celebensis, Rhinolophus 137 celebensis, Scolopax 150 celebensis, Scotophilus 194 celebensis, Strigocuscus 193 celebensis, Telmatherina 79 Celerio 254 Celestus 182, 199 celticus, Metatrichoniscoides 97 Centipede, Serpent Island 89 centralasicus, Caprimulgus 43 centralis, Cabassous 193 centralis, Cooperconcha 173 centralis, Craterocephalus 168 CENTRARCHIDAE 83, 169, 206, 247 CENTROPAGIDAE 91 Centropus 42, 152 Centropyge 84 cepasi, Conus 120 Cephalaeschna 106 Cephalakompsus 71 CEPHALASPIDOMORPHI 69, 167, 183, 201, 246 cephaloides, Leuciscus 202 cephalophus cephalophus, Elaphodus 227 cephalophus ichangensis, Elaphodus cephalophus michianus, Etaphodus 227 cephalophus, Elaphodus 197 Cephalophus 21, 130, 141, 228 Cephalopterus 46 Cephalorhynchus 18, 195 Ceraclea 254

Cerambyx 98 CERASTUIDAE 189 Ceratella 250 ceratina, Helix 125 Ceratogymna 154 Ceratophallus 113 Ceratophora 59 Ceratotherium 130, 225 Cercartetus 220 Cercocebus 140, 222, 245 Cercomacra 45, 155 Cercomela 158 CERCOPITHECIDAE 15, 129, 140, 194, 222, 245 Cercopithecus 15, 140, 194, 222 Cercyonis 253 cerdo, Cerambyx 98 Ceriagrion 208 Ceriferella 251 Cerion 123 CERIONIDAE 123 cernicum, Elasmias 124 cernicus, Bulinus 173 ceromatica, Pyreferra 253 certans, Nyctimene 136 Certhilauda 47, 157 cerverai, Cyanolimnas 36 cerverai, Ferminia 49 cervicalis, Pterodroma 30 cervicapra, Antilope 20 cervicornis, Macrodontia 98 CERVIDAE 20, 141, 178, 197, 226 cervinicauda, Myiagra 159 cerviniventris, Bathmocercus 50 cervinus, Notomys 144 Cervus 20, 178, 197, 226, 227 Cesonia 207 cestus, Achatinella 120 CETACEA 18, 129, 141, 195, 224, 242 **CETORHINIDAE 69** Cetorhinus 69 Cettia 158 ceuthma, Mautodontha 123 Ceuthonectes 96 Ceyx 44 chaberti, Trichomycterus 204 chaca, Kedestes 252 chacei, Procaris 96 Chachalaca, Rufous-headed 34 chacoensis, Acanthochelys 62 chacoensis, Anthus 157 chacoensis, Cabassous 193 **CHAENOPSIDAE 87** Chaerephon 13, 139 Chaeropus 177 Chaetarthria 249 Chaetodipus 231 Chaetodon 84 **CHAETODONTIDAE 84** Chaetomys 28 Chaetophractus 5 Chaetops 158 Chaetoptila 181 Chaetornis 50 Chafer, Cromwell 99 Chaffinch, Blue 132 Chalcalburnus 167, 202

CERAMBYCIDAE 98, 185, 248

chalcoides, Chalcalburnus 202 chalconotus, Phalacrocorax 31 chalcurum, Polyplectron 149 chalcurus, Ptilinopus 39 Chalepoxenus 100 Chalicodoma 208 Chalinolobus 12, 137, 138, 194 chalmersi, Marginella 213 chalumnae, Latimeria 88 chalybea, Euphonia 162 chalybeus, Centropus 152 Chamaeleon, Natal Midland Dwarf 165 Chamaeleon, Setaro's Dwarf 59 Chamaeleon, Smith's Dwarf 59 Chamaeleon, Zululand Dwarf 164 CHAMAELEONIDAE 59, 164 Chamaepetes 149 Chamalychaeus 213, 239 chamberlini, Formicoxenus 100 chamissonis, Philodryas 200 Chamois, Apennine 230 Chamois, Balkan 242 Chamois, Caucasian 230 Chamois, Chartreuse 230 Chamois, Southern 131 Chamois, Tatra 230 Chamois, Turkish 230 championi, Pogonomys 26 chantrei, Aphanius 243 chaophraya, Himantura 70 chaostola leucophaea, Antipodia 252 chapensis, Typhlomys 27 chapini, Chaerephon 139 chapini, Heterohyrax 20 chapini, Kupeornis 159 chaplini, Lybius 154 chapmani, Dobsonia 177 chappuisi, Eudiaptomus 207 Char, Angayukaksurak 204 Char, Kirikuchi 77 CHARACIDAE 75, 203, 236 CHARACIFORMES 75, 203, 236 Characin, Naked 75 Characodon, Bold 80 Characodon, Parras 184 Characodon 80, 184 CHARADRIIDAE 37, 150, 180 CHARADRIIFORMES 37, 131, 150, 180 Charadrius 37, 150 Charalito 168 Charaxes 253 Charaxes, Silver Barred 253 Charaxes 253 chariessa, Apalis 49 Charina 246 charitonius peruvianus, Heliconius 253 Charitospiza 162 charltonii, Arborophila 34 Charmosyna 40, 152 charon, Advena 125 charonda, Sasakia 253 CHAROPIDAE 123, 174, 189, 214, 245 Charpentieria 174 Chaser, Purple 107 Chasmistes 75, 183, 246 Chat, Buff-streaked 160

Chat, Fuerteventura 160

Chat, Herero 159 Chat, Sombre 158 Chat, Yellow 158 Chat-tanager 54 Chat-tyrant, Piura 156 chathamensis, Haematopus 37 chattanoogaense, Pleurobema 111 chaugaensis, Cambarus 93 Chauna 147 chaunax, Vitrinula 189 Chaunoproctus 182 chavaria, Chauna 147 cheatumi, Tryonia 212 Cheetah 16 Cheetah, Asiatic 223 Cheetah, Northwest African 223 cheiligona, Leiostyla 127 Cheilinus 87 cheiranthicola, Discula 124 Cheirodon 203 CHEIROGALEIDAE 13, 139, 220 Cheiromeles 139 Chela 71 CHELIDAE 62, 165, 200, 243 chelifer, Strongylognathus 102 Chelodina 62, 165, 200 Chelonia 63, 234 CHELONIIDAE 62, 234 CHELYDRIDAE 63 chengi, Meriones 25 Cherax 95, 208 chermesina, Myzomela 54 cherriei, Orthogeomys 142 cherriei, Synallaxis 155 cherriei, Thripophaga 45 Chersodromia 250 Chetia 84 chevrolati, Oryctes 250 chevrolati, Sandracottus 249 Chevrotain, Balabac 226 cheynei, Omphalotropis 210 Chibchanomys 143 chichijimana, Gastrocopta 191 chichijimana, Hirasea 124 chichijimana, Mandarina 214 chichijimana, Ogasawarana 112 chichijimana, Vitrinula 189 chicquera, Falco 149 Chihuahua, Charalito 72 chikae, Papilio 105 Chilatherina 78, 204, 243 chilensis, Bufo 201 chilensis, Diplomystes 75 chilensis, Geochelone 65 chiloensis, Myotis 138 Chiloglanis 76, 243 Chilonopsis 191, 192 CHILOPODA 89 Chilostoma 174, 215 chilotes complex, Paralabidochromis chiltoni, Trichomycterus 204 chimaera, Ornithoptera 171 chimaera, Uratelornis 44 Chimarrogale 6 Chimpanzee 16 Chimpanzee, Central 223

Chimpanzee, Eastern 223 Chimpanzee, Pygmy 16 Chimpanzee, Western 223 Chinchilla, Long-tailed 28 Chinchilla, Short-tailed 28 Chinchilla 28 CHINCHILLIDAE 28, 145 Chinemys 200 chinensis, Luehdorfia 208 chinensis, Sousa 196 chini, Betta 88 Chinkara 130 Chioglossa 68 Chionomys 143 Chipmunk, Henry Mountains 231 Chipmunk, Hidden Forest 231 Chipmunk, Organ Mountains 231 Chipmunk, Palmer's 22 Chipmunk, Pefiasco Least 231 Chipmunk, Selkirk Least 231 chipolaensis, Elliptio 110 chiriquita, Palaemnema 108 CHIROCEPHALIDAE 91 Chirocephalus 91 Chiroderma 11 Chironectes 135 Chironius 61 Chiropodomys 23, 143 Chirapotes 222, 241 CHIROPTERA 8, 129, 136, 177, 193, 241 Chirostoma 78, 204 chirurgica, Grylloblatta 99 Chitala 167 chitra, Chitra 65 Chitra 65 chittenangoensis, Succinea 217 Chlamydogobius 87 Chlamydotis 242 Chlamyphorus 5 Chlidonias 38 Chloaeltis 108 Chloebia 57 Chloephaga 147 Chloridops 181 Chlorilis 239 chlorinda chlorinda, Pseudalmenus 252 chlorinda conara, Pseudalmenus 252 chloris, Anthus 48 chlorocephala smythi, Cicindela 248 Chlorochrysa 54 Chlorocichla 48 CHLOROCYPHIDAE 106 Chlorogomphus 106, 237, 238 chlorolepidota, Pipreola 156 Chlorolestes 108, 171 chlaranothas, Zosterops 54 CHLOROPERLIDAE 187 Chloropeta 50 chloropharynx, Betta 88 Chlarapipo 156 Chloropsis 48, 157 chloroptera, Aratinga 40 chlororhynchus, Centropus 42 Chlorospingus 54 Chlorostilbon 181 Chlorotalpa 5 choaspes tumanana, Tirumala 237

chocoensis, Platyrrhinus 11 chocoensis, Veniliornis 155 Chocolate, Father Schoenig's 104 choctawensis, Villosa 256 Choeroniscus 11, 137 Choeronycteris 137 choloensis, Alethe 49 Choloepus 193 CHONDRINIDAE 174, 245 Chondropoma 212 Chondrostoma 71, 167, 202, 243 Chortippus 108 christenseni, Sonorella 174 christenseni, Turgenitubulus 256 christi, Erebia 171 Christianoconcha 127 Christinus 59 christophi, Strongylognathus 102 Chromis 86 chromogynos, Paralabidochromis 85 Chrotogale 18 Chrotomys 23 chrotorrhinus carolinensis, Microtus chrotorrhinus ravus, Microtus 232 CHRYSOCHLORIDAE 5, 241 Chrysochloris 5 Chrysococcyx 198 chrysogaster chrysogaster, Moschus chrysogaster leucogaster, Moschus 226 chrysogaster, Moschus 141 chrysogaster, Neophema 41 chrysogaster, Oncorhynchus 77 chrysogaster, Tupaia 8 chrysoleuca, Callithrix 14 Chrysolophus 149 chrysomelas, Leontopithecus 14 CHRYSOMELIDAE 248 Chrysomma 50, 158 chrysoparia, Dendroica 55 chrysoproctus, Pteropus 136 chrysopterygius, Psephotus 41 chrysopygus, Leontopithecus 14 chrysopygus, Rhynchocyon 29 Chrysoritis 102, 170 chrysosireticus, Hopladactylus 243 Chrysospalax 5 chrysostoma, Diomedea 146 chrysurus, Echimys 28 chthonia, Grallaria 46 chuana, Certhilauda 157 Chub, Alvord 72 Chub, Black Sea 202 Chub, Bonytail 72 Chub, Borax Lake 72 Chub, Flame 202 Chub, Gila 167 Chub, Humpback 72 Chub, Least 72 Chub, Oregon 73 Chub, Roundtail 246 Chub, Sandhills 203 Chub, Sicklefin 168 Chub, Slender 72

Chub, Sturgeon 72

Chub, Thicktail 183

Chub, Tui 246 Chub, Umpqua 168 Chub. Yaqui 72 Chuditch 3 chungarensis, Orestias 80 chungarensis, Trichomycterus 76 chungchowensis, Plectranthias 83 Chunyi 197 chunyi, Mazama 197 chupaderae, Pyrgulopsis 211 churinceanus carranzae, Mexipyrgus churinceanus churinceanus, Mexipyrgus 238 churinceanus escobedae, Mexipyrgus churinceanus lugoi, Mexipyrgus 238 churinceanus mojarralis, Mexipyrgus churinceanus multilineatus, Mexipyrgus churinceanus quadripaludium, Mexithauma 256 CHYDORIDAE 90 Chytra 119 Cicada, Cassini Periodical 170 Cicada, Decim Periodical 170 Cicada, Decula Periodical 170 Cicada, Myers' 251 Cicadabird, Black-bibbed 48 Cicadabird, Kai 157 Cicadabird, Sula 242 Cicadabird, Sumba 157 CICADELLIDAE 251 CICADIDAE 170, 251 cicatricosus, Plethobasus 111 Cicek 73 Cichlasoma 85, 236 Cichlherminia 158 CICHLIDAE 84, 132, 184, 236, 244, 247 Cichlopsis 158 Cicindela 98, 169, 248 CICINDELIDAE 98, 169, 248 Cicinnurus 164 Ciconia 31, 179 CICONIIDAE 31, 147, 179 CICONIIFORMES 31, 147, 179 cidi, Mycteroperca 83 Ciega, Anguila 82 Ciega, Nueva Dama 247 Ciega, Sardina 236 Ciego, Greater Pichi 5 Ciego, Juil 76 Ciego, Lesser Pichi 5 Cienegas, Bagre de Cuatro 247 Cienegas, Dardo de Cuatro 247 Cienegas, Guayacon de Cuatro 80 Cienegas, Mojarra Caracolera de Cuatro Cienegas, Mojarra de Cuatro 247 Cienegas, Perrito de Cuatro 243 Cienegas, Platy Cuatro 80 Cienegas, Robalo de Cuatro 247 Cienegas, Sardinilla Cuatro 80 ciliatus, Lanistes 173 cilicicus, Acomys 23 Cincinnatia 115

Cinclidium 158 Cinclodes, Royal 45 Cinclodes, White-bellied 45 Cinclodes 45 Cinclus 49 cincta, Notiomystis 54 cinctus, Saltator 163 cineracea, Ameiva 182 cineracea, Ducula 39 cineracea, Emberiza 162 cinerascens, Aplonis 57 cinerea, Alcippe 158 cinerea, Aonyx 140 cinerea, Callaeas 58 cinerea, Mycteria 31 cinerea, Neophoca 242 cinerea, Poospiza 163 cinerea, Zoothera 53 cinereiceps, Phapitreron 39 cinereiceps, Phyllastrephus 48 cinereicollis, Basileuterus 163 cinereifrons, Garrulax 50 cinereifrons, Heteromyias 159 cinereocapilla, Prinia 160 cinereum, Etheostoma 83 cinereus semotus, Lasiurus 245 cinereus, Eupetaurus 22 cinereus, Incerticyclus 188 cinereus, Lophuromys 197 cinereus, Phascolarctos 135 cinereus, Pseudochirulus 135 cinereus, Vanellus 150 Cinetodus 204 cingulatum, Ambystoma 68 cingulellum, Chilostoma 174 cinnaberinus, Cucujus 98 cinnamamea, Sporophila 163 cinnamomea, Terpsiphone 160 cinnamomeipectus, Hemitriccus 156 cinnamominus miyakoensis, Todirhamphus 246 Cinnyricinclus 57 cinyras, Libythea 186 Cipangochalax 213 Cipangocharax 213 Circaetus 148 circumcarinata, Monadenia 121 circumstomata, Diplommatina 210 Circus 148 Ciridons 181 cirnei cirnei, Rhynchocyon 245 cirnei hendersoni, Rhynchocyon 245 cirnei, Rhynchocyon 29 CIROLANIDAE 97 Cisco 243 Cisco, Blackfin 183 Cisco, Deepwater 183 Cisco, Longjaw 183 Cisco, Shortjaw 77 Cisco, Shortnose 77 ciscoides, Pogonichthys 183 Cissa 164 cisterciensorum, Bythiospeum 115 cisternatum, Phreatobius 204 Cisticola, Churring 158 Cisticola, Socotra 50 Cisticola, Tana River 198

CINCLIDAE 49

Cisticola 50, 158, 198 Cistothorus 49 citellus, Spermophilus 22 citrina, Partula 190 Civet, Hose's Palm 18 Civet, Javan Small-toothed Palm 224 Civet, Jerdon's Palm 18 Civet, Malagasy 18 Civet, Mentawai Palm 224 Civet, Owston's Palm 18 Civet, Sulawesi Palm 18 civettina, Viverra 18 CIXIIDAE 251 Clam, Bear Paw 133 Clam, China 133 Clam, Crocus 244 Clam, Giant 112 Clam, Scaly Clam or Fluted 133 Clam, Small Giant 133 Clam, Southern Giant 112 Clam, Tevoro 112 clamosus, Atrichornis 47 clanga, Aquila 33 clantoni, Stygobromus 89 clappi, Paravitrea 175 Clappia 115 clara, Echymipera 193 clara, Hirasiella 215 clara, Hypolestes 107 clara, Oliarces 254 clara, Partula 127 clarae, Arachnothera 161 Claravis 38 Clarias 76 CLARIIDAE 76 clarkei, Ammodorcas 20 clarkei, Volemys 145 clarki intermedius, Catostomus 246 clarki nantahala, Mesodon 239 clarki ssp., Oncorhynchus 247 clarki, Rhytida 127 clarkorum, Lacerta 60 clathrata, Quadrasiella 210 clathrata, Tryonia 212 clathratula, Lyropupa 216 claudinae, Trochoidea 175 Claudius 166 clausa, Elimia 117 clausiliaeformis, Sculptiferussacia 124 CLAUSILIIDAE 123, 174, 214, 239 clausus trossulus, Mesodon 239 clava, Pleurobema 111 Clavator 120 clavatus, Epigomphus 107 Clavicoccus 186 clavigera, Peripatopsis 187 cleberi, Oecomys 25 Clemencia, Espada de 205 clemenciae, Xiphophorus 205 clemensi, Puntius 73 clementina, Sterkia 175 Clemmys 64 clenchi, Mesodon 175 Cleopatra 173 cleophile, Danaus 170 Cleptornis 53 Clethrionomys 143, 232

Clibanornis 155 Clidomys 179 clinias, Parantica 104 CLINIDAE 87 Clinus 87 clipeata, Leptoxis 118 clodius shepardii, Parnassius 253 clodius strohbeeni, Parnassius 253 Cloeotis 136 Clubshell 111 Clubshell, Black 111 Clubshell, Ovate 112 Clubshell, Southern 172 Clubshell, Tennessee 112 Clubtail, Belle's Sand 107 Clubtail, Diminutive 171 Clubtail, Gulf 171 Clubtail, Hodges' 171 Clubtail, Twin-striped 171 Clubtail, Yellow-sided 107 CLUPEIDAE 71, 202, 236 **CLUPEIFORMES 71, 202, 236** Clupeoides 202 Clupeonella 202, 236 clymene, Stenella 196 Clyomys 28 clypealis, Agabus 98 Clytoceyx 198 Clytoctantes 45, 198 Clytorhynchus 158 Cnemidophorus 61, 200 Coachwhip, San Joaquin 246 coahuila, Mexistenasellus 97 coahuila, Terrapene 64 coahuilae, Durangonella 116 Coahuilix 115 Coati, Cozumel Island 17 cobanensis, Myotis 12 cobbi, Troglodytes 49 COBITIDAE 74, 168, 203 cobitis, Rhinichthys 74 Cobitis 74, 168, 203 Cobra, Central Asian 200 coccineus, Loxops 56 Coccymys 23 Coccyzus 42 cochlea, Carelia 189 Cochlicopa 245 COCHLICOPIDAE 123, 174, 214, 245 Cochliopa 115 Cochliopina 115, 211 Cochoa, Green 158 Cochoa, Javan 50 Cochoa, Purple 158 Cochoa, Sumatran 50 Cochoa 50, 158 COCHYLIDAE 252 Cockatoo, Palm 152 Cockatoo, Philippine 40 Cockatoo, Pink 152 Cockatoo, Salmon-crested 40 Cockatoo, Tanimbar 152 Cockatoo, White 40 Cockatoo, Yellow-crested 40 cockburni, Gyraulus 113 Cocoharpinia 90 coctei, Macroscincus 182

Cod. Atlantic 77 Cod, Clarence River 82 Cod, Mary River 236 Cod, Trout 82 codringtonia, Codringtonia 215 Codringtonia 174, 215 codringtonii, Codringtonia 174 Coelacanth 88 COELACANTHIFORMES 88 coelata, Helminthoglypta 125 coelestis, Bunomys 23 coelestis, Hypothymis 50 COELIAXIDAE 214 Coeliccia 238 Coeligena 43 Coelops 136, 194 coelus, Parides 208 Coelus 99 Coenagrion 106, 237 COENAGRIONIDAE 106, 171, 187, 208, coenensis, Petrogale 135 COENOBITIDAE 207 Coenocharopa 214 Coenocorypha 37, 150 Coenonympha 171 Coeranoscincus 165 coeruleoalba, Stenella 129 coerulescens, Coracina 157 cognata, Truncilla 255 cognatus, Amphidromus 173 cognatus, Rhinolophus 10 coibae, Dasyprocta 28 coibensis coibensis, Alouatta 221 coibensis trabeata, Alouatta 221 coibensis, Molossus 139 Coin, Tight 126 coindemerensis, Nactus 182 Colaptes 44 colax, Myrmica 101 colei, Pogonomyrmex 101 colensoi, Pholacrocorax 31 Coleophora 186 COLEOPHORIDAE 186 COLEOPTERA 98, 169, 185, 248 Coleura 10 Collared-dove, White-winged 151 collaria, Amazona 151 collaris, Accipiter 147 collei, Cyclura 59 COLLEMBOLA 250 collina, Pleurobema 111 collingii, Setobaudinia 244 collinsi, Spindasis 252 Collisella 187 colliveri, Cralopa 123 Collocalia 43, 153, 198 Colluricincla 158 colmani, Jardinella 116 Colobus, Black 15 Colobus, Bouvier's Red 222 Colobus, Elliot's Red 245 Colobus, Foa Red 222 Colobus, Kahuzi Red 223 Colobus, Lomami Red 223 Colobus, Maiko Red 223 Colobus, Miss Waldron's Bay 223

Colobus, Neumann's Black-and-white 222 Colobus, Niger Delta Red 222 Colobus, Olive 140 Colobus, Oustalet's Red 245 Colobus, Pennant's Red 223 Colobus, Preuss's Red 223 Colobus, Prigogine's Black-and-white 222 Colobus, Red 140 Colobus, Rwenzori Black-and-white 222 Colobus, Semliki Red 223 Colobus, Tana River Red 223 Colobus, Tanzanian Black-and-white 222 Colobus, Temminck's Red 223 Colobus, Thollon's Red 245 Colobus, Uganda Red 245 Colobus, Uhehe Red 223 Colobus, Western Black-and-white 140 Colobus, White-thighed Black-and-white 15 Colobus, Zanzibar Red 223 Colobus 15, 140, 222 colocolo, Oncifelis 241 colombianus, Neocrex 150 colombianus, Otus 152 colonus, Rhinomyias 160 colonus, Rhyacophila 255 Colophon 99, 170 coloradensis, Acroloxus 112 coloria, Erythrura 57 Colparion 190 Coluber 61 COLUBRIDAE 61, 165, 182, 200, 234, Columba 38, 132, 151, 180 columbiana, Fluminicola 211 columbianus, Crypturellus 146 columbianus, Geocapromys 178 columbianus, Odontophorus 149 columbica, Cicindela 98 COLUMBIDAE 38, 132, 150, 180 COLUMBIFORMES 38, 132, 150, 180 Columbina 38 Colymbetes 248 comata, Presbytis 15 Combshell, Cumberlandian 255 Combshell, Round 187 Combshell, Southern 255 Combshell, Upland 255 Combtail 132 comes, Ogasawarana 209 Comet, Bronze-tailed 153 Comet, Grey-bellied 44 cometes, Procambarus 94 comizo, Barbus 71 commersoni, 'Scops' 181 commersonii, Cephalorhynchus 195 commixtus, Caseolus 256 comorana, Amauris 104 comorensis, Rhachis 189 compacta, Cochliopina 211 compacta, Leptoxis 118 compacta, Partula 190 compacta, Victaphanta 127 compactus, Radiodiscus 123 compar, Ephemera 250 compassbergae, Thestor 103

complanata alabamensis, Lasmigona complanata, Pseudanodonta 172 complanata, Pupina 212 compressa, Bythinella 115 compressa, Leguminaia 255 compressa, Siphonaria 113 compunctus, Hydrotarsus 98 comyntas texanus, Everes 252 Conacmella 210 concavospira, Achatinella 120 conchorum, Menidia 168 conchos, Catostomus 75 Conchos, Dardo de 83 Conchos, Matalote 75 CONCHOSTRACA 92 conchramis, Desmopachria 248 concinna concinna, Petrogale 220 concinna monastria, Petrogale 220 concinna, Aegialia 99 concinna, Leiostyla 127 concinna, Petrogale 135 concinna, Pittoconcha 125 concolor coryi, Puma 224 concolor cougar, Puma 224 concolor, Artibeus 137 concolor, Hylobates 16 concolor, Lentipes 206 concolor, Neospiza 56 concolor, Salanoia 17 concolor, Scomberomorus 88 concolor, Simias 15 concolor, Xenospingus 55 concretus, Caprimulgus 153 condita, Tijuca 46 conditor, Leporillus 24 Condor, California 32 Conebill, Giant 162 Conebill, Pearly-breasted 163 Conebill, Tamarugo 55 Conepatus 224 configurata, Euploea 244 confirmata, Paradoxa 213 confluentus, Salvelinus 77 confusa, Helicoverpa 186 confusa, Partulina 121 congaraea, Elliptio 172 congensis, Afropavo 34 congestum, Moxostoma 203 congica, Aonyx 140 congicus, Mops 139 congobelgica, Crocidura 6 Congosorex 6 Congothemis 208 conica, Fonscochlea 116 conica, Paludinella 211 conica, Phrantela 116 conica, Pyrgulopsis 211 conica, Samoana 127 CONIDAE 120, 213 conilis, Plagigeyeria 116 Conilurus 178 Conioptilon 156 Conirostrum 55, 163 connasaugaensis, Strophitus 172 connieae, Pseudomugil 243 Connochaetes 130, 228

connollyana, Hypolysia 217 connollyi, Cecilioides 124 connus, Procambarus 94 Conocephaloides 109 conoides, Trochomorpha 217 Conolophus 59 Conomyrma 100 Conopophaga 155 CONOPOPHAGIDAE 155 conopsis, Helicopsis 174 conorhynchus, Tetranesodon 204 Conothraupis 54, 162 conoveri, Leptotila 39 Conozoa 187 conradi, Stygobromus 89 conradicus, Medionidus 172 conradti reductidentata, Gulella 239 conradti, Halolimnohelix 215 conradti, Pseudoglessula 217 Conraua 67 consanguis, Gomphurus 107 conservatio, Branchinecta 91 consetti, Simulator 173 consimilis, Mautodontha 189 consimilis, Oliarus 251 consobrina, Mautodontha 189 consobrinorum, Zosterops 161 consors, Caseolus 256 conspicillatus conspicillatus, Lagorchestes 219 conspicillatus leichardti, Lagorchestes conspicillatus, Basileuterus 163 conspicillatus, Lagorchestes 135 conspicillatus, Paradoxornis 160 constanciae, Cynolebias 79 constantiae, Micoureus 135 constanzae, Liolaemus 199 constricta, Aaadonta 214 constricta, Bellamya 119 constrictus, Somatogyrus 212 constrictus, Trissexodon 245 contigua, Trochomorpha 217 continuatalis, Hedylepta 186 Contopus 156 contorta, Ochrotrichia 254 contortus, Letomola 214 contracta, Bellamya 119 contracta, Parartemia 91 contractus, Brotomys 178 Conuropsis 180 Conus 120, 213 cookei, Omphalotropis 210 cookei, Orangia 123 cookei, Thaanumella 210 cookearum, Pseudopsectra 254 cooki, Eleutherodactylus 67 cookii, Cyanoramphus 40 cookii, Pterodroma 30 Cooperconcha 173 cooperi paludis, Synaptomys 233 cooperi relictus, Synaptomys 233 cooperi, Orconectes 94 cooperi, Paraxerus 22 cooperi, Stygobromus 89 cooperianus, Plethobasus 111 coosaensis, Somatogyrus 212

coosawattae, Cambarus 93 Coot. Hawaiian 36 Coot, Horned 36 Coot, Mascarene 180 Cooter, Rio Grande 166 Cophura 250 Copper, Bathurst 103 Copper, Blue Jewel 252 Copper, Clayton's 252 Copper, Dickson's 103 Copper, Drakensburg 170 Copper, Hermes 103 Copper, Large 170 Copper, Lion's Head 252 Copper, Tsomo River 103 Copper, Wallengren's 104 Copperhead, Pygmy 61 coppingers, Radiodiscus 214 Copris 250 coprotheres, Gyps 33 Copsychus 50 coquereli, Mirza 13 Coquette, Short-crested 43 Coquette, Spangled 153 cor, Cardioderma 136 cor, Fusconaia 111 CORACIIDAE 44, 154 CORACIIFORMES 44, 153, 198, 246 Coracina 48, 157, 242 corais couperi, Drymarchon 246 coralensis, Ptilinopus 151 Coralliozetus 87 corayi, Lacconectus 248 cordacea comptena, Heteronympha 253 cordatum, Pleurobema 172 cordelia, Euploea 104 Cordulegaster 106 CORDULEGASTERIDAE 106, 237 CORDULIIDAE 106, 171, 238 CORDYLIDAE 59, 165 Cordylus 59, 165 coreena, Jardinella 116 Coregonus 77, 183, 204, 243, 247 Corella, Western 152 Coreobagrus 76 coriacea, Dermochelys 63 coriacea, Moapa 73 corinnae, Pseudochirops 5 Cormorant, Bank 147 Cormorant, Crowned 147 Cormorant, Galápagos 31 Cormorant, Pallas's 179 Cormorant, Pygmy 147 Cormorant, Red-legged 147 Cormorant, Socotra 147 Corncrake 36 cornea, Amastra 188 corneacastata, Leiostyla 127 corneovirens, Meridolum 122 Cornigomphus 107 cornuta cornuta, Cyclura 234 cornuta stejnejeri, Cyclura 234 cornuta, Cyclura 60 cornuta, Fulica 36 carnutus, Eunymphicus 40 cornutus, Rhinolophus 137 cornutus, Trimeresurus 200

corona, Melanotaenia 204 coronata, Daphnia 90 coronatum blainvillei, Phrynosoma 246 coronatus, Anthracoceros 154 coronatus, Eulemur 13 coronatus, Harpyhaliaetus 33 coronatus, Hippocampus 81 caronatus, Hipposideros 136 coronatus, Malurus 159 coronatus, Phalacrocorax 147 corozalus, Puertoricomys 178 corpulenta, Pleurocera 118 corroboree, Pseudophryne 67 corrugata, Jardinella 116 corrugatus, Aceros 44 corsac, Vulpes 195 corsica, Cyrnotheba 245 corsica, Epimyrma 100 corsica, Moitessieria 116 CORVIDAE 58, 164 corvina, Aplonis 182 corvina, Megalaima 154 corvina, Terpsiphone 53 Corvus 58, 164 corynophyllus, Hipposideros 10 Coryphaspiza 54 Coryphomys 178 cosensis, Gerbillus 24 cosmetus, Palikirus 214 Cossypha 50 costaricensis, Touit 152 costata, Craspedoma 244 costata, Namibacypris 185 costatus, Xylotoles 185 costipennis, Deronectes 248 costulata, Bellamya 119 costus, Turgenitubulus 122 cotiellae, Pyrenaeania 174 Cotinga, Banded 46 Cotinga, Black-and-gold 156 Cotinga, Black-faced 156 Cotinga, Black-tipped 156 Cotinga, Chestnut-bellied 46 Cotinga, Grey-winged 46 Cotinga, Purple-throated 156 Cotinga, Shrike-like 46, 246 Cotinga, Swallow-tailed 156 Cotinga, Turquoise 46 Cotinga, White-cheeked 47 Cotinga, White-winged 46 Cotinga, Yellow-billed 46 Cotinga 46 COTINGIDAE 46, 156, 246 cotrelli, Chrysoritis 102 COTTIDAE 82, 184, 206, 244 Cottontail, Dice's 29 Cottontail, Mexican 146 Cottontail, New England 29 Cottus 82, 184, 206 Coturnicops 36, 198 Coturnix 180 Coua, Snail-eating 181 Coua, Verreaux's 152 Coua 152, 181 Coucal, Biak 152 Coucal, Black-hooded 42 Coucal, Brown 152

Coucal, Green-billed 42 Coucal, Kai 152 Coucal, Rufous 152 Concal, Short-toed 152 Coucal, Sunda 42 couchiana, Quadrula 112 couchianus, Xiphophorus 80 courseni, Synallaxis 45 Courser, Jerdon's 37 Cow, Steller's Sea 178 cowani, Charaxes 253 coxeni, Pupina 256 coxi, Hipposideros 10 Coxiella 256 coxingi, Niviventer 144 Crab, Californian Bay Pea 96 Crab, Coconut 207 Crab, Horseshoe 171, 209 Crab, Tree Hole 95 cracens, Marmosops 3 CRACIDAE 34, 149, 180 CRACTICIDAE 199 Cracticus 199 cragini, Etheostama 169 Crake, Andaman 37 Crake, Ascension Flightless 180 Crake, Band-bellied 150 Crake, Colombian 150 Crake, Dot-winged 36 Crake, Hawaiian 180 Crake, Henderson 36 Crake, Kosrae 180 Crake, Laysan 180 Crake, Ocellated 149 Crake, Rufous-faced 36 Crake, Rusty-flanked 36 Crake, Speckled 198 Cralopa 123, 214 crameri albomaculata, Euploea 237 crameri, Oregonichthys 73 Crane, Black-necked 36 Crane, Blue 36 Crane, Hooded 131 Crane, Red-crowned 36 Crane, Sarus 149 Crane, Siberian 36 Crane, Wattled 36 Crane, White-naped 36 Crane, Whooping 36 CRANGONYCTIDAE 89, 185 Crangonyx 89 Cranioleuca 155 CRASEONYCTERIDAE 10 Craseonycteris 10 Craspedoma 133, 244 crassa, Aplonis 164 crassa, Leptoxis 118 crassa, Partulina 188 crassalus, Ochthebius 249 crassicauda omnivora, Bdeogale 224 crassicauda, Gila 183 crassicauda, Salpingotus 23 crassicaudata, Manis 142 crassidens, Pseudorca 242 crassilabris, Diplommatina 210 crassilabris, Paralabidochromis 85 crassilabris, Partula 190 crassilabris, Somatogyrus 212

crassilabrum, Amastra 188 crassirostris, Oriolus 57 crassirostris, Oryzoborus 162 crassispinis, Hystrix 145 Crassispira 213 crassula, Auriculella 213 crassus, Euastacus 96 crassus, Phoxinellus 203 crassus, Somatogyrus 212 crassus, Unio 172 Craterocephalus 78, 168, 204, 243 Craterodiscus 173 Crateromys 23 craveri, Synthliboramphus 150 crawfordi, Torresitrachia 244 crawshayi, Bellamya 119 Crax 34 Cray, Glenelg River 96 Cray, Murray River 96 Crayfish, Alachua Light-fleeing Cave237 Crayfish, Apalachicola Cave 93 Crayfish, Bearded Red 95 Crayfish, Big Blue Spring Cave 95 Crayfish, Big South Fork 93 Crayfish, Big-cheeked Cave 94 Crayfish, Black Creek 95 Crayfish, Bluegrass 93 Crayfish, Brazoria 94 Crayfish, Chickamanga 93 Crayfish, Choctaw Riverlet 94 Crayfish, Coastal Lowland Cave 95 Crayfish, Conchas 94 Crayfish, Corrollton 94 Crayfish, Crittenden 94 Crayfish, Cypress 93 Crayfish, Furneaux Burrowing 95 Crayfish, Greenshorn Burrowing 93 Crayfish, Hatchie Burrowing 94 Crayfish, Hell Creek 94 Crayfish, Jackson Prarie 94 Crayfish, Kiamichi 94 Crayfish, Lagniappe 95 Crayfish, Least 93 Crayfish, Lilly Pilly Burrowing 95 Crayfish, Little Tennessee 93 Crayfish, Louisville 94 Crayfish, Madagascar Freshwater 208 Crayfish, Mallacoota Burrowing95 Crayfish, Miami Cave 95 Crayfish, Mississippi Flatwoods94 Crayfish, Mount Arthur Burrowing 96 Crayfish, Narracan Burrowing 96 Crayfish, Nashville 94 Crayfish, Noble 93 Crayfish, Obey 93 Crayfish, Oklahoma Cave 93 Crayfish, Oktibbeha Riverlet 94 Crayfish, Orlando Cave 94 Crayfish, Panama City 95 Crayfish, Phantom Cave 95 Crayfish, Putnam County Cave 95 Crayfish, Red-black 93 Crayfish, Santa Fe Cave 95 Crayfish, Scottsdale Burrowing 96 Crayfish, Shasta 93 Crayfish, Silver Glen Springs Cave 94 Crayfish, Speckled Burrowing 94

Crayfish, Spiny-tail 95

Crayfish, Stone 93 Crayfish, Strzelecki Burrowing 96 Crayfish, Tennessee Cave 94 Crayfish, Tombigbee Riverlet 94 Crayfish, Valley Flame 93 Crayfish, Warragul Burrowing 96 Crayfish, White-clawed 93 Crayfish, Withlocoochee Light-fleeing Cave 237 Crayfish, Woodville Cave 95 creaghi, Rhinolophus 137 creagra, Macropsalis 153 creaseri, Kinosternon 166 creatopus, Puffinus 30 Creekshell, Kentucky 256 Creeper, Hawaii 56 Creeper, Molokai 181 creightoni, Crematogaster 100 Crematagaster 100 Cremnomys 23 crenata, Crocidura 241 crenatella, Elimia 117 Crenichthys 79 creon, Theskelomensor 125 crepidus, Epigomphus 107 Crescent-chest, Marañon 155 crescenta, Aegialia 99 Crested-tern, Chinese 38 cretica, Macrothele 207 crex, Crex 36 Crex 36 cribrellum, Syrichtus 252 Cricetulus 143 Cricket, Arizona Giant Sand Treader 108 Cricket, Bay Area Ground 133 Cricket, Black-headed Jerusalem 133 Cricket, Coachelia Giant Sand Treader Cricket, Coachella Valley Jerusalem 109 Cricket, Howarth's Cave 108 Cricket, Kauai Thin-footed Bush 108 Cricket, Kaumana Cave 108 Cricket, Kelso Giant Sand Treader 108 Cricket, Kelso Jerusalem 108 Cricket, Keys Scaly 108 Cricket, Laricis Tree 108 Cricket, Navajo Jerusalem 109 Cricket, Oahu Deceptor Bush 187 Cricket, Port Conception Jerusalem 108 Cricket, Prairie Mole 209 Cricket, Predatory Bush 109 Cricket, Samwell Cave 254 Cricket, Schauinsland's Bush 108 Cricket, Tanner's Black Camel 108 Cricket, Volcanoes Cave 108 Crimson-wing, Shelley's 57 crinifrons, Muntiacus 20 criniger, Gallicolumba 39 criniger, Setornis 157 Criniger 48 crinigera, Agrotis 186 crispus, Capricornis 130 crispus, Pelecanus 30 crissalis, Vermivora 163 cristata, Calyptura 46 cristata, Dasyprocta 197 cristata, Genetta 18 cristata, Goura 39

cristata, Gubernatrix 55 cristata, Hystrix 145 cristata, Imnadia 92 cristata, Lophotibis 147 cristata, Neritina 209 cristata, Tadorna 32 cristatus, Proteles 224 cristatus, Amblyrhynchus 59 cristatus, Hobbseus 94 cristatus, Trachypithecus 140 cristatus, Triturus 132 cristicauda, Dasycercus 3 Cristigibba 214 Cristilabrum 121, 122, 173 croatica, Knipowitschia 87 croaticus, Chirocephalus 91 croaticus, Paraphoxinus 73 crocatus, Neurergus 201 crocea, Epthianura 158 crocea, Tridacna 244 Crocias, Grey-crowned 50 Crocias, Spotted 158 Crocias 50, 158 Crocidura 241 Crocidura 6, 7, 136, 193, 241 crockeri, Laticauda 62 Crocodile, African Slender-snouted 199 Crocodile, American 58 Crocedile, Cuban 58 Crocodile, Estuarine 242 Crocodile, Morelet's 199 Crocodile, Orinoco 58 Crocodile, Philippines 58 Crocodile, Siamese 58 Crocodile, West African Dwarf 58 CROCODYL1A 58, 199, 242 CROCODYLIDAE 58, 199, 242 Crocodylus 58, 199, 242 crocuta, Crocuta 129 Crocuta 129 croesus, Ornithoptera 105 Croilia 169 Crombec, Short-billed 160 crosnieri, Astacoides 95 Crossarchus 224 Crossbill, Scottish 199 Crossidius 248 crossleyi, Atelornis 44 crossleyi, Zoothera 161 Crossleyia 50 crassoptilon, Crossoptilan 34 Crossoptilon 34, 149 Crotalus 62, 246 Crow, Andaman 104 Crow, Banggai 58 Crow, Biak Dark 104 Crow, Biak Threespot 104 Crow, Bismark 244 Crow, Bougainville 164 Crow, Brown-headed 164 Crow, Cordelia's 104 Crow, Flores 58 Crow, Hawaiian 58 Crow, Javan 170 Crow, Mariana 58 Crow, Mascarene 104 Crow, Murphy's 104

Crow, Nicobar 104 Crow, Outcast 237 Crow, Pagenstecher's 244 Crow, Palm 164 Crow, Schaus' 170 Crow, Seram 244 Crow, Seychelles 104 Crow, Spartan 104 Crow, Sulawesi Pied 244 Crow, Sulawesi Striped Blue 244 Crow, Sumatran 171 Crow, Swainson's 171 Crow, Tobler's 171 Crow, Weymer's 244 Crow, White-billed 164 Crow, White-necked 58 crowleyi, Parantica 244 Crowned-pigeon, Southern 39 Crowned-pigeon, Victoria 39 Crowned-pigeon, Western 39 cruciger, Lagenorhynchus 242 crudigularis, Arborophila 149 cruentata, Pyrrhura 41 crumeniferus, Hipposideros 194 crumpi, Diomys 143 Crunomys 23 CRUSTACEA 89, 132, 169, 185, 207, 237, 244, 247 cryophilus, Megadontomys 144 Crypsirina 58 crypta, Ficedula 50 Cryptazeca 123, 174 crypticus, Rhantus 249 CRYPTOBRANCHIDAE 68, 201 Cryptochia 255 Cryptochloris 5 cryptodytes, Cambarus 93 Cryptomastix 127 Cryptomys 145 Cryptophaps 151 Cryptoprocta 18 Cryptosaccus 174 Cryptospiza 57 Cryptotis 7 Crypturellus 29, 146 Crysocyon 140 crystalis, Pyrgulopsis 211 Crystallaria 83 crystallinus, Bulinus 173 CTENIZIDAE 207 CTENODACTYLIDAE 27 Ctenoglypta 190 CTENOMYIDAE 145 Ctenomys 145 Ctenophila 124, 245 Ctenophorus 59 ctenopus, Tropodiaptomus 185 Ctenotus, Hamelin 60 Ctenotus 60 Cualac 79 cubana, Anetia 170 cubanus, Solenodon 5 cubensis, Barbouria 95 cubensis, Tyrannus 47 Cuckoo, Cocos 42

Cuckoo, Moluccan 198

Cuckoo, Rufous-breasted 42

Cuckoo-dove, Andaman 151 Cuckoo-dove, Black 39 Cuckoo-shrike, Blackish 157 Cuckoo-shrike, Buru 48 Cuckoo-shrike, Grauer's 157 Cuckoo-shrike, Mauritius 48 Cuckoo-shrike, McGregor's 48 Cuckoo-shrike, Pied 157 Cuckoo-shrike, Réunion 48 Cuckoo-shrike, Western Wattled48 Cuckoo-shrike, White-winged48 Cuckooshrike, Slaty 242 CUCUJIDAE 98 Cucujus 98 CUCULIDAE 42, 152, 181, 198 CUCULIFORMES 42, 152, 181, 198 cucullata, Andigena 154 cucullata, Carduelis 56 cucullata, Crypsirina 58 cucullata, Gibberula 213 cucullata, Grallaricula 46 cucullatus, Carpornis 156 cucullatus, Raphus 180 Cui-ui 75 cujus, Chasmistes 75 Culicivora 156 cultratus, Pelecus 202 cultriventris, Clupeonella 202 culturatus, Niviventer 144 culveri, Antrobia 114 culveri, Lirceus 97 cumberlandensis, Phoxinus 73 cumingi, Newcombia 120 cumingi, Phloeomys 26 cumingiana, Carelia 189 cumingianus, Ancylastrum 113 cumingii, Megapodius 149 cumingii, Puntius 132 cummingi, Palaemonetes 95 cumulus, Oreokera 214 cuneata, Partula 191 cuneolus, Fusconaia 111 cunicularius, Sylvilagus 146 cuniculinsulae, Placostylus 190 cuniculus, Orthogeomys 22 Cuon 16 Cuora 64, 165, 200 Cupedora 122, 173 cuppedius, Steatomys 145 cupreocauda, Lamprotornis 164 cupreus ornatus, Callicebus 221 cuprosa, Kerivoula 138 cuprosus, Pipistrellus 13 Curaeus 56 curasoae, Leptonycteris 11 Curassow, Alagoas 180 Curassow, Blue-billed 34 Curassow, Northern Helmeted 34 Curassow, Red-billed 34 Curassow, Southern Helmeted 34 Curassow, Wattled 34 CURCULIONIDAE 98, 185, 248 curis, Liolaemus 199 Curlew, Bristle-thighed 37 Curlew, Eskimo 37 Curlew, Far Eastern 150 Curlew, Slender-billed 38

Currassanthura 96 currierianus, Somatogyrus 212 cursor, Liophis 61 curta, Achatinella 120 curta, Echiopsis 62 curta, Leptobotia 203 curta, Lithasia 118 curta, Pleurocera 118 curtipes, Ectemnius 251 curtisii, Oxygastra 106 curtisoma, Encheloclarias 76 curtissima, Euonyma 128 curtum, Pleurobema 111 curtus, Hipposideros 136 curvipes, Hygrotus 248 curvisuturus, Engaeus 95 curytibana, Hirinaba 128 Cuscus, Admiralty 241 Cuscus, Black-spotted 4 Cuscus, Gebe 193 Cuscus, Ground 193 Cuscus, Obi 4 Cuscus, Small 193 Cuscus, Southern Common 219 Cuscus, Stein's 4 Cuscus, Telefomin 4 Cuscus, Waigeo 193 Cuscus, Woodlark Island 241 Cusimanse, Angolan 224 Cusk-eel, New Providence 77 cuspidata, Gulella 216 cuvieri, Gazella 21 cuvieri, Orestias 205 cyanea, Paratherina 78 cyaneoviridis, Tachycineta 157 cyanescens, Terpsiphone 160 cyanocephala, Starnoenas 39 Cyanocorax 164 cyanogenia, Eos 40 Cyanolimnas 36 Cyanolyca 58, 164 cyanomichla, Margaronia 253 cyanopecta, Alcedo 153 cyanophrys, Eupherusa 43 Cyanophrys 102 cyanopis, Columbina 38 Cyanopsitta 40 cyanoptera, Thraupis 163 cyanopterus, Lutjanus 84 Cyanoramphus 40, 152, 180, 181 cyanurus, Psittinus 152 Cyathopoma 210 cychlura cychlura, Cyclura 234 cychlura figginsi, Cyclura 234 cychlura inornata, Cyclura 234 cychlura, Cyclura 60 Cyclanorbis 166 Cycleptus 168 Cyclocephala 250 Cyclocosmia 207 Cycloderma 166 Cyclodina 60, 243 cyclolepis, Barbus 202 Cyclonaias 172 CYCLOPHORIDAE 114, 133, 187, 210, 238, 244 Cyclophorus 187

CYCLOPIDAE 92, 132, 185 cyclopis, Macaca 15 CYCLOPOIDA 92, 132, 185 Cycloptilum 108 cyclostomaformis, Lioplax 120 Cyclosurus 187 cyclotis, Nyctimene 136 Cyclura 59, 60, 234 Cyclyrius 252 cygnoides, Anser 32 Cygnus 147, 179 Cylichnidia 124 Cylindraspis 182 cylindrella, Gonospira 128 cylindrellus, Carunculina 255 cylindrellus, Toxolasma 112 cylindrica cylindrica, Quadrula 238 cylindrica strigillata, Quadrula 255 cylindrica, Amastra 121 cylindrica, Bythinella 115 cylindricauda, Sorex 7 cylindricornis, Capra 21 cylindricus, Ceratogymna 154 Cylindrovertilla 245 Cylindrus 174 Cylloepus 249 cymatilis, Cambarus 93 Cymatium 173 cymatotaenia, Percina 84 Cymbiodyta 249 Cymothoe 253 CYNOCEPHALIDAE 8 cynocephalus, Thylacinus 177 Cynocephalus 8 Cynogale 18 Cynolebias 79 Cynomys 22, 131, 230 Cynopterus 136 Cyornis 50, 158 cypha, Gila 72 cyphotergous, Gibbibarbus 72 cyphyus, Plethobasus 172 CYPRI NODONTIFORMES 243, 247 CYPRIDIDAE 97, 185 CYPRIDINIDAE 97 cypriensis, Coluber 61 Cyprinella 71, 72, 167, 246 CYPRINIDAE 71, 132, 167, 183, 202, 236, 243, 246 CYPRINIFORMES 71, 132, 167, 183, 202, 236, 243, 246 Cyprinodon 79, 80, 183, 243, 247 CYPRINODONTIDAE 79, 168, 183, 205, 243, 247 CYPRINODONTIFORMES 79, 168, 183, 205, 236 Cyprinus 72, 183, 202, 236 Cyprogenia 110 Cypseloides 43, 153, 198 Cypsnagra 162 Cyrnotheba 245 cyrtandrae, Nesosydne 251 cyrtandricola, Nesosydne 251 Cyrtonyx 149 Cyrtopeltis 251

Cysticus 213

cytherea, Partula 191

Cytora 212 Cyttarops 136 daanidentata, Pyrenaearia 126 Dabchick, New Zealand 29 dabrerai, Parantica 104 dabryanus, Acipenser 70 Dace, Desert 72 Dace, Las Vegas 183 Dace, Longnose 246 Dace, Mexican 183 Dace, Moapa 73 Dace, Mountain Blackside 73 Dace, Relict 74 Dace, Speckled 246 Dace, Tennessee 168 dachilleae, Nannopsittaca 152 Dacnis, Black-legged 54 Dacnis, Scarlet-breasted 54 Dacnis, Tit-like 163 Dacnis, Turquoise 55 Dacnis, Viridian 162 Dacnis, White-bellied 162 Dacnis 54, 162 dacotae, Hesperia 102 dacotiae, Saxicola 160 dactyliophorus, Doryrhamphus 205 Dactylopsila 5 daedalus, Nyctophilus 139 daemen, Tachyoryctes 145 daguerrei, Oxyepoecus 101 daguerrei, Solenopsis 101 dahli, Meriones 25 dahli, Phrynops 62 Daihinibaenetes 108 Dalatias 69 dalhousiensis, Craterocephalus 78 Dalla 208 dalli, Phocoenoides 129 dalloni, Gerbillus 24 dalmaticus, Strongylognathus 102 dama mesopotamica, Dama 227 dama, Gazella 21 Dama 227 Damaliscus 21, 130, 228 Damba 85 dami, Paretroplus 85 damii, Xenopirostris 49 dammah, Oryx 21 Damochlora 122 damoni, Paramelania 119 Damselfly, Adytum 106 Damselfly, Barrens Bluet 106 Damselfly, Black-lined 106 Damselfly, Frey's 237 Damselfly, Jugorum Megalagrion 187 Damselfly, Leptodemas 106 Damselfly, Nigrohamatum 171 Damselfly, Oahu 106 Damselfly, Oceanic 106 Damselfly, Orange-black 106 Damselfly, Pacific 106 Damselfly, Pele 237 Damselfly, San Francisco Forktail 106 Damselfly, Southern 106 Danaus 170, 237 Dancea 124

dani, Hyphydrus 248 danielae, Fallicambarus 94 Danio, Barred 72 Danio 72, 202 danjoui, Jabouilleia 51 dannatti, Parantica 104 danubialis, Lobaunia 116 daphne, Poecilmitis 103 Daphnia 90, 91 DAPHNIIDAE 90 **DARCYTHOMPSONIIDAE 96** darevskii, Vipera 62 dariensis, Elliptio 172 darlingtoni, Riekoperla 109 Darter, Amber 84 Darter, Arkansas 169 Darter, Ashy 83 Darter, Bayou 169 Darter, Bluestripe 84 Darter, Boulder 83 Darter, Coldwater 83 Darter, Coppercheek 83 Darter, Crystal 83 Darter, Eastern Sand 83 Darter, Finescale Saddled 169 Darter, Fountain 83 Darter, Freckled 84 Darter, Goldline 84 Darter, Kanawha 169 Darter, Leopard 84 Darter, Longhead 169 Darter, Longnose 169 Darter, Maryland 184 Darter, Mexican 83 Darter, Niangua 83 Darter, Okaloosa 83 Darter, Oriental 147 Darter, Paleback 83 Darter, Pinewoods 206 Darter, Redband 169 Darter, Rio Grande 83 Darter, Sharphead 169 Darter, Slackwater 83 Darter, Snail 84 Darter, Spotted 169 Darter, Stargazing 169 Darter, Striated 83 Darter, Trispot 83 Darter, Tuscumbia 83 Darter, Watercress 83 Darter, Yellowcheek 83 darwini, Bulimulus 126 darwini, Nesoryzomys 178 darwinii, Rhinoderma 201 daryi, Adelphicos 61 Dáska 168 DASYATIDAE 70 Dasycercus 3 dasycneme, Myotis 12 dasymallus, Pteropus 9 Dasymys 23, 143 Dasyornis 50 **DASYPODIDAE 5, 136, 193** Dasyprocta 28, 145, 197 DASYPROCTIDAE 28, 145, 197 Dasypus 5, 193 Dasyure, Broad-striped 193 Dasyure, Red-bellied 193

danfordi, Eudontomyzon 167

DASYURIDAE 3, 135, 193, 219 DASYUROMORPHIA 3, 135, 177, 193, 219 Dasyurus 3, 135, 219 Daubentonia 14 daubentonii, Myopterus 194 DAUBENTONIIDAE 14 dauricus, Huso 70 davidi, Arborophila 34 davidi, Echymipera 193 davidi, Niltava 159 davidi, Parantica 104 davidi, Strix 42 davidianus, Andrias 201 davidianus, Elaphurus 20 davidianus, Paradoxornis 51 daviesi, Micronycteris 137 davisi, Farula 255 davisi, Pyrgulopsis 211 davisoni, Pseudibis 31 dayi, Hypseleotris 169 dayi, Nyctimystes 66 dayi, Suncus 8 deaconi, Rhinichthys 183 deanae, Orconectes 94 dearolfi, Crangonyx 89 deburghiae, Tropidophora 118 decampi, Campeloma 120 DECAPODA 93, 185, 207, 237 decastigma, Platynectes 249 decemlineata, Mungotictis 17 deceptor, Leptogryllus 187 decia, Hydroptila 254 decipiens, Achatinella 120 decipiens, Somatogyrus 212 decisum, Pleurobema 172 deckenii, Rhinolophus 194 deckerti, Tilapia 86 declivis, Vallonia 175 decora, Achatinella 188 decora, Paradisaea 58 decorata, Lasmigona 111 decorata, Trachemys 64 decorticata, Sinployea 189 decorus, Hydaticus 248 decticostoma, Prognathochromis 184 dedeckkeri, Canthocamptus 96 dedecora, Ptychalaea 127 Deer, Alpine Musk 226 Deer, Atlas 226 Deer, Bactrian 226 Deer, Black Musk 141 Deer, Burmese Brow-antlered 226 Deer, Calamian 20 Deer, Cedros Island Mule 227 Deer, Chinese Water 141 Deer, Columbian White-tailed 227 Deer, Corsican Red 226 Deer, Eld's 20 Deer, Forest Musk 141 Deer, Himalayan Musk 226 Deer, Ichang Tufted 227 Deer, Indo-Chinese Hog 226 Deer, Key 227 Deer, Kuhl's 20

Deer, Little Red Brocket 141

Deer, Manipur Brow-antlered 226

Deer, Marsh 20 Deer, McNeill's 226 Deer, Michie's Tufted 227 Deer, North Andean 197 Deer, Pampas 141 Deer, Pere David's 20 Deer, Persian Fallow 227 Deer, Philippine Brown 197 Deer, Phillipine Spotted 20 Deer, Schomburgk's 178 Deer, Siberian Musk 20 Deer, South Andean 20 Deer, Swamp 20 Deer, Thailand Brow-antlered 226 Deer, Thorold's 20 Deer, Tibetan Red 226 Deer, Tufted 197 Deer, Yarkand 226 defilippiana, Pterodroma 30 degenerata, Leiostyla 127 degeni, Platytaeniodus 184 degodiensis, Mirafra 48 Deinacrida 108, 109, 209, 254 Deinocossonus 248 Deinomimesa 251 deiroleucus, Falco 149 dejectus, Stygobromus 89 dekeyseri, Lonchophylla 11 delacouri, Hapalomys 143 delacouri, Trachypithecus 15 delalandei, Coua 181 Delanymys 242 delcourti, Hoplodactylus 182 delectus, Graptodytes 98 delesserti, Garrulax 159 delicata, Jacksonena 173 delicatissima, Iguana 60 delicatulus, Pseudomys 144 delicatus, Procambarus 94 Delma, Collared 60 Delma, Striped Tailed 60 Delma 60 Deloneura 186 delongi, Mixogaster 250 Delos 216 deloustali, Paramesotriton 68 DELPHACIDAE 251 Delphinapterus 18 DELPHINIDAE 18, 129, 195, 242 delphinuloides, Geomitra 124 Delphinus 242 delphis, Delphinus 242 Deltistes 75 demersus, Spheniscus 146 demidoff, Percarina 84 demissus, Eptesicus 12 demissus, Hipposideros 10 demonstrator, Mops 139 Dendragapus 149 Dendrocitta 164 DENDROCOLAPTIDAE 45, 155 dendrocolaptoides, Clibanornis 155 Dendrocopos 154 Dendrocygna 32 Dendrogale 8 Dendrohyrax 19, 226 Dendroica 55, 163

Dendrolagus 4, 135, 193 Dendromus 23, 143 dendrophorus, Streptocephalus 91 Dendropicos 154 Dendroprionomys 143 Dendrortyx 34, 149 Dendrotrochus 215 dendyi, Acanthanura 250 dendyi, Streptocephalus 91 deningeri, Lichmera 162 Denisonia 62 denningi, Agapetus 254 dennistouni, Stachyris 160 densirostris, Mesoplodon 196 dentata, Litoria 243 dentata, Stygicola 77 dentatis dentatis, Aloeides 252 dentatis maseruna, Aloeides 252 dentatis, Aloeides 102 dentatus, Batomys 197 dentex, Prognathochromis 184 dentex, Salmo 204 denti, Otomys 144 denticulata, Branchinella 91 denticulata, Geochelone 65 denticulata, Lamprocystis 215 denticulus, Eudiscopus 138 dentiens, Ningbingia 122 dentifera, Partula 191 dentiplaga, Euploea 244 dentirostris, Ailuroedus 164 depasoapicata, Opanara 123 depressa, Geoemyda 64 depressicollis, Deronectes 98 depressicornis, Bubalus 20 depressum, Meridolum 122 depressus, Natator 63 depressus, Sternotherus 64 depressus, Turgenitubulus 122 deraniyagalai, Schismatogobius 207 derasa, Tridacna 112 derbiana, Psittacula 152 derbianus derbianus, Tragelaphus 230 derbianus gigas, Tragelaphus 230 derbianus, Caluromys 3 derbianus, Oreophasis 34 derbianus, Taurotragus 141 derbyi, Eriocnemis 153 DERMAPTERA 99 **DERMATEMYDIDAE 63** Dermatemys 63 **DERMOCHELYIDAE 63** Dermochelys 63 Dermogenys 81, 168 **DERMOPTERA 8** Deroceras 121, 173, 215 Deronectes 98, 248 deserticola, Psychomastatix 108 deserticola, Spaniacris 133 desertor, Pseudomys 144 deshayesi, Gonospira 128 desidens, Pleurodonte 189 Desman, Pyrenean 8 Desman, Russian 8 Desmana 8 desmarestii, Megalomys 178 desmazuresi, Tropidophora 188

deteani, Nephrurus 59 detecta, Harmogenanina 215 devecchi, Barbopsis 71 devexus, Distocambarus 94 dewaali, Redigobius 169 deweesae, Cambarus 93 dewegeri, Paralabrax 168 Dexteria 91 dhofarensis, Crocidura 6 Dhole 16 dhongoka, Kachuga 166 diaboli, Dionda 72 diabolicus, Eurostopodus 43 diabolis, Cyprinodon 79 diadema candidus, Propithecus 221 diadema diadema, Propithecus 221 diadema edwardsi, Propithecus 221 diadema perrieri, Propithecus 221 diadema, Charmosyna 40 diadema, Helicodiscus 174 diadema, Propithecus 14 dialeucos, Odontophorus 149 diametra natalica, Iolaus 252 diana diana, Cercopithecus 222 diana roloway, Cercopithecus 222 diana, Cercopithecus 15 dianae, Emballonura 10 dianae, Pseudocampylaea 190 dianae, Tarsius 194 dianchiensis, Sphaerophysa 75 diaphana, Samoana 127 diaphanum, Bythiospeum 244 Diaphlebia 107 DIAPTOMIDAE 91, 185, 207 Diaptomus 207 diardi, Lophura 35 Diastole 125, 190 diazi, Romerolagus 29 Dibatag 20 Dibbler 3 **DICAEIDAE 53, 161, 199** Dicaeum 53, 161 dicei, Sylvilagus 29 Dicerorhinus 19, 225 Diceros 19 dichotomus, Blastocerus 20 dichroma, Dionda 72 dickeyi, Cyanocorax 164 dickeyi, Peromyscus 26 dickhilleni, Alytes 66 dicksoni calviniae, Thestor 252 dicksoni dicksoni, Thestor 252 dicksoni, Oxychaeta 103 dicksoni, Stygionympha 253 dicksoni, Tsitana 252 Diclidurus 10, 136 dicobolus yarrowi, Catostomus 246 Dicranopselaphus 249

Desmocerus 248

Desmopachria 248

desperata, Crocidura 6

despreauxii, Obelus 126

destructor, Cherax 95

desmonda, Mesodontrachia 174

destefanii, Strongylognathus 102

desmondi teita, Papilio 253

desperatus, Gammarus 185

Dicrostanyx 23, 197, 232 DICRURIDAE 57, 164 Dicrurus 57, 58, 164 didactylus, Choloepus 193 DIDELPHIDAE 3, 135, 193 DIDELPHIMORPHIA 3, 135, 193 didelphoides, Mesomys 197 didinus, Megalaperyx 179 Didunculus 38 dieffenbachii, Gallirallus 180 difficilis, Phylloscartes 156 difficilis, Pupina 212 Digger, Rusty Grave 93 Diglossa 54, 162 Dikdik, Silver 21 Dikume 85 dikume, Konia 85 dilatatum, Sympetrum 187 dimidiata, Monodelphis 135 dimidiata, Pomarea 52 dimidiatus, Oryzomys 144 dimidiatus, Philydor 155 diminutus, Cambarellus 93 diminutus, Gomphus 171 dimorpha, Achatinella 188 dimorpha, Palaina 210 dimorpha, Uroglaux 198 Dinaromys 143 dinellianus, Pseudocolopteryx 47 dineutoides, Pleurodytes 249 Dingiso 4 dinniki, Vipera 62 DINOMYIDAE 28 Dinomys 28 dinops, Hipposideros 136 Dinornis 179 diodon, Charpentieria 174 Diomedea 29, 30, 146 DIOMEDEIDAE 29, 146 Diomys 143 Dionda 72, 246 dioptrica, Australophocaena 196 Diphylla 137 Diplodon 110 Diplogale 18 Diploglossus 59, 164 Diplommatina 210, 256 **DIPLOMMATINIDAE 210, 256** diplomphalus, Hirasea 124 Diplomys 28, 146 Diplomystes 75, 203 DIPLOMYSTIDAE 75, 203 Diplothrix 143 Dipnelix 214 DIPODIDAE 23, 142, 197, 232, 242 Dipodomys 23, 131, 142, 231, 232 Dipper, Rufous-throated 49 DIPROTODONTIA 4, 129, 135, 177, 193, 219, 241 DIPTERA 99, 185, 250 Dirce 252 Dirce 252 dirksi, Formica 100 Disa 74 disa, Puntius 74 Disc. Marbled 123

discicollis, Agabus 98 DISCIDAE 123, 174, 190, 214 Discocharopa 214 DISCOGLOSSIDAE 66, 132, 182, 246 Discoglossus 66, 182, 246 discolor, Lathamus 41 Disconaias 110 discrepans, Ogasawarana 209 discrepans, Oliarus 251 Discula 124 Disculella 124, 245 discurus, Prioniturus 152 Discus 123, 174, 190, 214 disjuncticus, Engaeus 95 dispar, Coracina 157 dispar, Lycaena 170 dispersa, Nesopupa 216 disposita, Ficedula 50 dissimilis, Psephotus 152 dissimilis, Turdus 161 dissita, Cranioleuca 155 distans, Amazilia 43 distans, Lethe 253 distinguendus, Dryophthorus 185 Distocambarus 94 ditaenia, Gila 72 ditrema, Etheostoma 83 Ditropis 114 diurnus, Taudactylus 67 diuturna, Pardosa 88 Divellomelon 122 diversa, Isonychia 250 diversipes, Hygrotus 248 diversus, Euastacus 96 diversus, Neochanna 204 Diving-petrel, Peruvian 30 Djam-djam 222 dobrogicus, Triturus 201 Dobsonia 8, 136, 177 Dodo 180 Dog, African Wild 16 Dog, Arizona Black-tailed Prairie 230 Dog, Bush 16 Dog, Mexican Prairie 22 Dog, Utah Prairie 131 dohertyi persimilis, Ypthima 254 dohertyi, Coracina 157 dohertyi, Lophazosteraps 161 dohertyi, Oreolyce 252 dohertyi, Pitta 156 dohertyi, Ptilinopus 39 dohertyi, Troides 105 dohmi, Paleoxenus 249 dohrni, Palaina 210 dohrnii, Ramphodon 43 dolabelloides, Lexingtonia 172 dolabraeformis, Lampsilis 111 dolani, Homoeoneuria 250 Dolania 250 Dolapex 125 dolei, Carelia 189 dolei, Palmeria 56 dolei, Partulina 213 Doleschallia 253 **DOLICHOPODIDAE 185** dolichostoma, Partula 191 Dolichotis 145

Discherodontus 243

doliolum, Palaina 210 Doliornis 46 dollmani, Maxomys 24 dolloff, Meta 88 Dolomedes 88 Dolophilodes 255 Dolores, Guayacon de Hacienda 80 dolorosa, Partula 191 Dolphin, Atlantic Spotted 196 Dolphin, Atlantic Hump-backed 196 Dolphin, Atlantic White-sided 242 Dolphin, Black 195 Dolphin, Bottlenose 196 Dolphin, Clymene 196 Dolphin, Commerson's 195 Dolphin, Common 242 Dolphin, Dusky 195 Dolphin, Fraser's 195 Dolphin, Ganges River 19 Dolphin, Heaviside's 195 Dolphin, Hector's 18 Dolphin, Hourglass 242 Dolphin, Indo-Pacific Hump-backed 196 Dolphin, Indus River 19 Dolphin, Irrawaddy 195 Dolphin, La Plata River 196 Dolphin, Northern Right Whale 242 Dolphin, Pacific White-sided 242 Dolphin, Pantropical Spotted 129 Dolphin, Peale's 195 Dolphin, Risso's 195 Dolphin, Rough-toothed 196 Dolphin, Southern Right Whale 195 Dolphin, Spinner 129 Dolphin, Striped 129 Dolphin, White-beaked 242 domicella, Lorius 41 dominicana, Heteroxolmis 47 dominicensis, Myotis 12 domogledi, Metrioptera 109 Donacia 248 donosoi, Liolaemus 199 Doradito, Dinelli's 47 dorae, Dendrocopos 154 dorcas claytoni, Lycaena 252 dorcas dorcas, Damaliscus 228 dorcas pelzelni, Gazella 228 dorcas phillipsi, Damaliscus 228 dorcas, Damaliscus 130 dorcas, Gazella 141 Dorcatragus 21 Dorcopsis, Black 4 Dorcopsis, Macleay's 4 Dorcopsis 4 Dorcopsulus 4 Dorcus 249 doretta, Euploea 244 doriae, Chiroderma 11 doriae, Hesperoptenus 12 doriae, Hipposideros 194 doriae, Megatriorchis 148 doriae, Mormopterus 13 doriae, Phascolosorex 193 dorianus, Dendrolagus 4 Dormouse, Common 145 Dormouse, Fat 145 Dormouse, Forest 145

Dormouse, Garden 27

Dormouse, Japanese 28 Dormouse, Mouse-tailed 28 Doronomyrmex 100 dorothea dorothea, Trigonoscuta 248 dorothea, Marmosops 3 dorotheae, Amytornis 49 dorsalis dorsalis, Cicindela 248 dorsalis, Cephalophus 141 dorsalis, Homoroselaps 165 dorsalis, Lepilemur 14 dorsalis, Phacellodomus 155 Doryrhamphus 205 Dotterel, New Zealand 37 douglasensis, Stenelmis 249 douglasi, Sminthopsis 4 douglasorum, Eptesicus 138 Dove, Brown-backed 151 Dove, Cloven-feathered 38 Dove, Grenada 39 Dove, Ochre-bellied 39 Dove, Socorro 180 Dove, Tolima 39 Dove, Whistling 151 Dowitcher, Asian 150 downiei, Elliptio 172 doyeni, Trigonoscuta 248 dracomontana, Rana 167 draconicus, Chlorolestes 171 draconilla, Nyctimene 9 draconis, Eurypegasus 205, 236 Dragon, Komodo 61 Dragon, South-eastern Lined Earless 234 Dragon, Yinnietharra Rock 59 Dragonet, St Helena 87 Dragonfly, Alleghany Snaketail 238 Dragonfly, Banded Bog Skimmer 106 Dragonfly, Big Thicket Emerald 106 Dragonfly, Bronze Clubtail 107 Dragonfly, Cherokee Clubtail 107 Dragonfly, Edmund's Snaketail 107 Dragonfly, Florida Spiketail 106 Dragonfly, Howe's Midget Snaketail 107 Dragonfly, Ohio Emerald 106 Dragonfly, Relict Himalayan 106 Dragonfly, Septima's Clubtail 107 Dragonfly, Shining Macromia 106 Dragonfly, Tennessee Clubtail 107 Draparnaudia 124 DRAPARNAUDIIDAE 124 DREPANIDIDAE 56, 163, 181 Drepanis 181 Drepanoptila 38 Drill 15 Drill, Fernando Po 222 Drill, Mainland 222 Driloleirus 109, 110 drimica, Ohridohauffenia 188 Dromaeocercus 158 DROMAIIDAE 179 Dromaius 179 dromas, Dromus 110 Dromiciops 3 Dromus 110 Drongo, Aldabra 164 Drongo, Andaman 164 Drongo, Grand Comoro 57

Drongo, Sumatran 164 Drosophila 185 DROSOPHILIDAE 185 druceanus entabeni, Charaxes 253 druceanus williamsi, Charaxes 253 drummondhayi, Epinephelus 82 dryadopa, Oeoblia 253 dryanderensis, Offachloritis 122 dryas, Cercopithecus 194 dryas, Gracilinanus 3 dryas, Microgale 5 dryburghi, Thestor 103 Drymaeus 121 Drymarchon 246 Drymophila 155 Dryobius 248 Dryococelus 187 Dryocopus 45, 154 Dryomys 27, 145 Dryophthorus 185 Dryotribus 185 dubautianus, Aeschrithmysus 248 dubia, Cercomela 158 dubia, Partulina 121 dubiaquercus, Antrozous 11 Dubiraphia 249 dubitabilis, Nesopupa 216 dubius drucei, Hypolimnas 253 dubius, Callicebus 14 dubius, Leptoptilos 31 dubius, Notodiaptomus 92 ducalis, Megadytes 185 Duck, Black-headed 147 Duck, Blue 32 Duck, Ferruginous 32 Duck, Freckled 32 Duck, Hawaiian 32 Duck, Labrador 179 Duck, Laysan 32 Duck, Mandarin 147 Duck, Mauritian 179 Duck, Meller's 147 Duck, Philippine 147 Duck, Pink-headed 32 Duck, Spectacled 147 Duck, White-headed 32 Duck, White-winged 32 Ducula 39, 151 dufresniana, Amazona 151 dugesi, Thermosphaeroma 97 dugon, Dugong 19 Dugong 19 Dugong 19 DUGONGIDAE 19, 178 Duiker, Abbott's 21 Duiker, Aders' 21 Duiker, Bay 141 Duiker, Black 141 Duiker, Black-fronted 141 Duiker, Harvey's Red 130 Duiker, Jentink's 21 Duiker, Maxwell's 141 Duiker, Natal Red 130 Duiker, Ogilby's 141 Duiker, Peters' 141 Duiker, Red-flanked 130 Duiker, Ruwenzori Black-fronted 228 Duiker, Weyn's 141

Drongo, Mayotte 58

Drongo, Príncipe 164

Duiker, White-bellied 141 Duiker, White-legged 228 Duiker, Yellow-backed 141 Duiker, Zebra 21 Dulce, Tollo de Agua 75 duloticus, Leptothorax 100 dulvertonensis, Angrobia 188 dumasi, Zoothera 199 dumerili, Acrantophis 61 dumerilianus, Peltocephalus 64 dumerilii dumerilii, Ambystoma 246 dunckeri, Phallostethus 79 dunckeri, Solegnathus 82 dunkeri, Bythinella 115 dunkerianus, Diplodon 110 dunmalli, Furina 62 Dunnart, Bollanger Id 219 Dunnart, Carpentarian 4 Dunnart, Chestnut 219 Dunnart, Common 219 Dunnart, Julia Creek 4 Dunnart, Kangaroo Island 3 Dunnart, Sandhill 4 Dunnart, White-footed 193 dunni, Hynobius 68 dunni, Kinosternon 64 dunsirei, Garra 72 duplicidentata, Opanara 123 duponti, Gonospira 128 Dupontia 124, 190 Dupucharopa 123 duquesneyi, Celestus 199 dura gammiei, Lethe 253 Durangonella 116 Durbania 252 durgadasi, Hipposideros 10 durnfordi nicholi, Charaxes 253 Dusicyon 177, 195, 241 Dussartius 92 dussumieri, Casarea 61 duthieae, Chlorotalpa 5 dutoiti, Arthroleptides 182 duttoniana, Lithasia 118 duvauceli branderi. Cervus 226 duvauceli duvauceli, Cervus 226 duvauceli ranjitsinhi, Cervus 226 duvauceli, Cervus 20 duvauceli, Hoplodactylus 243 duvergeri, Acilius 98 duyvenbodei, Aethopyga 53 dwightii, Partulina 213 dwyeri, Chalinolobus 12 Dyacopterus 136 dyeriana, Angrobia 114 Dynastes 250 Dyscophus 67 Dysithamnus 45, 155 Dysnomia 187, 255 Dysticheus 248 DYTISCIDAE 98, 185, 248 Dytiscus 98, 248 eachamensis, Melanotaenia 78 Eagle, Black-and-chestnut 148 Eagle, Crested 148

Eagle, Crowned 33

Eagle, Gurney's 148

Eagle, Greater Spotted 33

Eagle, Harpy 148 Eagle, Imperial 33 Eagle, New Guinea Harpy 33 Eagle, Philippine 33 Eagle, Solitary 148 Eagle, Spanish Imperial 33 Eagle, White-tailed 148 Eagle-owl, Lesser 42 Eagle-owl, Philippine 42 Eagle-owl, Spot-bellied 152 Eagle-owl, Usambara 42 Eanus 249 eapensis, Nesopupa 216 Eared-nightjar, Satanic 43 Eared-pheasant, Blue 149 Eared-pheasant, Brown 34 Eared-pheasant, Tibetan 34 Eared-pheasant, White 34 Earthcreeper, Bolivian 155 Earthworm, Giant Gippsland 110 Earthworm, Oregon Giant 110 Earthworm, Washington Giant 109 Earwig, Saint Helena 99 eastmani, Colophon 99 eastwoodae, Tetradactylus 182 eatoni, Komarekiona 109 ebenus, Lasiurus 12 eberhardi, Pseudotricula 256 ebii, Epixerus 142 Ebonyshell, Round 172 eboraci, Euploea 244 eboratum, Heteragrion 107 ecaudata, Diphylla 137 ecaudatus, Chaeropus 177 Ecchlorolestes 108, 171 ecclesi, Bellamya 119 Ecclisomyia 255 Echidna, Long-beaked 3 Echidna, Short-beaked 219 ECHIMYIDAE 28, 145, 178, 197 Echimys 28, 146, 197 echinatus, Cottus 184 echinatus, Procambarus 95 echinatus, Tarsomys 27 ECHINIDAE 169 echinista, Echymipera 193 Echinodillo 208 ECHINOIDA 169 ECHINOIDEA 169 echinopyge, Canthocamptus 96 echinulata, Discula 124 Echinus 169 Echiopsis 62 echo, Psittacula 41 Echymipera, Clara's 193 Echymipera, David's 193 Echymipera, Menzies' 193 Echymipera 193 econfinae, Procambarus 95 Economidichthys 87 Ectemnius 251 Ectodemia 186 Ectopistes 180 edax, Olallamys 146 eddystonensis, Placostylus 126 edeaensis, Louisea 96

edeni, Balaenoptera 195 Edentulina 216 edgbastonensis, Jardinella 116 editha bayensis, Euphydryas 253 editha monoensis, Euphydryas 253 edmitchelli, Collisella 187 edmundo, Ophiogomphus 107 edwardii, Elephantulus 29 edwardshilli, Hipposideros 136 edwardsi, Lepilemur 241 edwardsi, Lophura 35 Edwardsia 217 edwardsiana, Grapholitha 254 EDWARDSIIDAE 128, 217 Edwardsina 99 Eel, Blind Cave 205 Eel, Spiny 205 Eelgoby, Bearded 169 Efferia 250 effractor, Monomorium 101 effugiens, Actinella 124 ega, Scleronycteris 11 egeria, Chalinolobus 137 egerides, Aloeides 102 Egernia 60, 234 egregius, Lasiurus 138 Egret, Chinese 31 Egret, Slaty 31 Egretta 31 egridiri, Phoxinellus 73 Eider, Spectacled 32 Eider, Steller's 32 Eidoleon 254 eigenmanni, Evarra 183 Eira 224 eisentrauti, Crocidura 6 eisentrauti, Hybomys 24 eisentrauti, Konia 85 eisentrauti, Melignomon 44 eisentrauti, Myosorex 7 ejuncida, Hypseleotris 169 Elachistodon 200 Eland, Common 131 Eland, Eastern Giant 230 Eland, Giant 141 Eland, Western Giant 230 Elaphe 200 elaphinus, Rattus 26 Elaphodus 197, 227 Elaphoidella 96 elaphra, Collocalia 43 Elaphrus 98 Elaphurus 20 elaphus affinis, Cervus 226 elaphus alashanicus, Cervus 226 elaphus bactrianus, Cervus 226 elaphus barbarus, Cervus 226 elaphus corsicanus, Cervus 226 elaphus hanglu, Cervus 226 elaphus macneilli, Cervus 226 elaphus wallichi, Cervus 226 elaphus yarkandensis, Cervus 226 ELAPIDAE 61, 165, 200, 234 Elapognathus 165 Elasmias 120, 124, 213 ELASMOBRANCHII 69, 201 Elasmodontomys 179

Edelia 82

Elassoma 83, 169, 247 ELASSOMATIDAE 83, 169, 247 elata, Ceratogymna 154 elata, Tryonia 212 **ELATERIDAE 249** elatior, Rhodacme 113 elator, Dipodomys 23 elatus, Stygobromus 89 eldi eldi, Cervus 226 eldi siamensis, Cervus 226 eldi thamin, Cervus 226 eldi, Cervus 20 elecebra, Pheidole 101 electilis, Kupea 253 electra, Idea 104 electra, Peponocephala 242 electra, Videna 217 Electron 154 elegans elegans, Laniisoma 246 elegans nevadensis, Spermophilus 231 elegans zagrebensis, Niphargus 237 elegans, Achatinella 188 elegans, Cyclanorbis 166 elegans, Cyprinodon 79 elegans, Georissa 209 elegans, Gila 72 elegans, Laniisoma 46 elegans, Leptomys 24 elegans, Leptopoecile 159 elegans, Macruromys 24 elegans, Margaretamys 24 elegans, Omphalotropis 210 elegans, Ordtrachia 122 elegans, Sterna 150 elegantulus, Euoticus 139 Eleothreptus 153 ELEOTRIDAE 87, 169, 206, 244, 247 Eleotris 169, 206 Elephant, African 19 Elephant, Asian 19 Elephant-Shrew, Black-and-rufous29 Elephant-shrew, Chequered 245 Elephant-shrew, Four-toed 245 Elephant-shrew, Golden-rumped 29 Elephant-shrew, Henderson's Chequeredn Elephantbird, Great 179 **ELEPHANTIDAE 19** Elephantulus 29 Elephas 19 Eleuthemis 238 Eleutherodactylus 67, 201 elevata, Amplirhagada 244 Elfin, San Bruno 252 elgini, Spilornis 148 elgonius, Crocidura 6 Elimia, Banded 117 Elimia, Black-crest 117 Elimia, Cahaba 212 Elimia, Caper 117 Elimia, Closed 117 Elimia, Cobble 117 Elimia, Coldwater 212 Elimia, Constricted 117 Elimia, Flaxen 117 Elimia, Fusiform 117 Elimia, Gladiator 117

Elimia, Hearty 117 Elimia, High-spired 188 Elimia, Knotty 117 Elimia, Lacy 117 Elimia, Lily Shoals 117 Elimia, Mud 117 Elimia, Pupa 117 Elimia, Puzzle 117 Elimia, Pygmy 117 Elimia, Ribbed 117 Elimia, Rough-lined 117 Elimia, Round-rib 117 Elimia, Short-spired 117 Elimia, Silt 117 Elimia, Slowwater 117 Elimia, Spindle 117 Elimia, Squat 212 Elimia, Walnut 117 Elimia 117, 188, 212 Eliomys 27, 145 elisa, Fabriciana 253 elisabeth, Myadestes 159 Elisolimax 215 Eliurus 24, 143, 242 Elk, Siberian 226 elkensis, Cambarus 93 Elktoe, Appalacian 110 Elktoe, Cardina 110 Elktoe, Cumberland 255 ellermani, Mayermys 24 Ellinopyg34steos 81 ellioti, Syrmaticus 35 elliotii, Pitta 156 Ellipsaria 172 ellipsiprymnus defassa, Kobus 229 ellipsiprymnus ellipsiprymnus, Kobus 229 ellipsiprymnus, Kobus 130 elliptica, Litthabitella 116 Elliptio 110, 172, 255 Elliptoideus 110 elliptus, Lanistes 173 Ellobius 24 ELMINTHIDAE 99, 249 Elona 245 elongata, Amastra 188 elongata, Calamoecia 91 elongata, Cobitis 203 elongata, Cryptazeca 123 elongata, Hemisaga 109 elongata, Indotestudo 65 elongata, Victodrobia 117 elongatula, Omphalotropis 210 elongatulus, Unio 256 elongatus, Acheilognathus 71 elongatus, Ambassis 244 elongatus, Cycleptus 168 elpenor, Atlantisia 180 elphinstonii, Columba 151 elseri, Bythiospeum 173 Elseya 62, 200 eludens, Grallaria 155 elusivus, Hydroporus 248 Elusor 62 elvira, Cremnomys 23 emarginatus, Myotis 12 emarginatus, Scotomanes 194

emarginatus, Stygobromus 89 Emballonura 10, 129 EMBALLONURIDAE 10, 129, 136 Emberiza 54, 55, 162 EMBERIZIDAE 54, 162 Emberizoides 162 Embernagra 162 **EMBIOTOCIDAE 247** Emerald, Calverts' 171 Emerald, Grace's 181 Emerald, Honduran 43 Emerald, Orange-spotted 106 Emerald, Táchira 43 emersa, Dobsonia 8 emersoni, Partula 127 emeryi, Strongylognathus 102 emigdionis, Plebejus 252 emiliae, Gracilinanus 3 emiliae, Monodelphis 3 empedonepia, Tettigidea 109 Emperor, Western Forest 253 Empetrichthys 184, 247 emphanum, Polyplectron 35 Empicoris 251 EMPIDIDAE 250 Emu, Kangaroo Island 179 Emu, King Island 179 Emu-tail, Brown 158 Emuwren, Mallee 132 EMYDIDAE 64, 165, 200, 243, 246 Emydoidea 165 Emydura 243 emys, Manouria 65 Emys 165 Enallagma 106, 208 Encheloclarias 76 endersi, Cryptotis 7 ENDODONTIDAE 124, 190, 214 endoi, Pipistrellus 194 endymion, Poecilmitis 103 eneidae, Eleutherodactylus 201 Engaeus 95, 96 Engaewa 96 enganus, Rattus 26 engonata, Discus 214 **ENGRAULIDAE 202** Enicognathus 152 ENIDAE 124, 215, 245 enigma, Todirhamphus 154 enniensis, Vallonia 217 ENOPLA 128, 175, 217 enoptes smithi, Euphilotes 252 ensipennis, Campylopterus 43 entellus, Semnopithecus 140 Enterochromis 85 Entomacrodus 206 entomostoma, Brazieria 217 Eodiaptomus 92 Eoglaucomys 142 Eolagurus 131 Eoleptestheria 92 eos, Bulimulus 126 Eos 40, 152 Eozapus 23 **EPACTERISCIDAE 92** Epalzeorhynchos 183 epaminondas, Graphium 105

Epargyreus 252 Epargyreus 252 eperlanus, Osmerus 204 Ephemera 250 Ephemerella 250 EPHEMERELLIDAE 250 EPHEMERIDAE 186, 250 **EPHEMEROPTERA 99, 186, 250** ephemerus, Stygobromus 89 EPHYDRIDAE 250 epicentra, Hedylepta 186 epicharis, Sturanyella 209 Epicrates 61, 165, 234, 246 Epigomphus 107 Epimachus 58, 164 Epimymra 100 Epimyrma 100 Epinephelus 82, 83, 168, 206 Epioblasma 110, 111, 209, 238 Epiophlebia 106 **EPIOPHLEBIIDAE 106** epiroticus, Paraphoxinus 202 epirrhinos, Hephaestus 168 Epischura 92, 207 episcopa ssp., Dionda 246 Epixerus 142 epomophora, Diomedea 146 Epomophorus 8, 136 Epomops 8 epsilanus, Myospalax 144 Eptesicus 12, 138, 194 Epthianura 158 eques, Phycodorus 205 EQUIDAE 19, 178, 225, 242 equinus, Hippotragus 130 Equus 19, 178, 225, 242 erasa, Brazieria 217 Erebia 171, 253 Erebonectes 92 erectus, Hippocampus 81 Eremarionta 125, 174, 239 eremiana, Perameles 177 Eremichthys 72 eremita, Geronticus 31 eremita, Nesocichla 159 eremita, Osmoderma 99 eremita, Partula 191 eremita, Sonorella 174 Eremitalpa 5 eremitus, Leiocephalus 182 Eremomela, Turner's 50 Eremomela 50 Eremophilus 204 Erepta 125, 190 ereptrix, Myrmica 101 **ERETHIZONTIDAE 28, 178** Eretmochelys 63 Ergaticus 163 ergatogyna, Leptothorax 100 erica, Crocidura 6 ericae, Tryonia 212 ericeticola, Lycosa 207 Erikssonia 102 Erimystax 72 ERINACEIDAE 6, 136, 241 erinaceus, Clavicoccus 186

erinaceus, Hippocampus 81

Eriacnemis 43, 153 Eriogaster 208 eriophora, Kerivoula 12 Erithacus 158 ernsti, Graptemys 166 Eropeplus 24 erosa, Kinixys 200 erosa, Omphalotropis 210 Erpetogomphus 238, 244 errans, Panoquina 170 erskinensis, Allocharopa 123 erubescens portosancti, Leptaxis 239 erubescens, Barbus 71 Erymnochelys 64 erythrocephala, Podocnemis 65 erythrocephalus, Hylocryptus 45 Erythroecia 253 erythrogaster, Cercopithecus 15 erythrogenys, Aratinga 152 erythronota, Zoothera 161 erythronotos, Formicivora 45 erythrophthalma, Lophura 35 erythropoma, Pyrgulopsis 211 erythrops, Procambarus 95 erythroptera, Gallicolumba 39 erythroptera, Ortalis 34 erythropus, Anser 32 erythropygius, Pericrocotus 157 erythropygius, Sturnus 164 erythrotis erythrotis, Cercopithecus 222 erythrotis, Cercopithecus 15 Erythrotriorchis 33, 198 Erythrura 57 escambia, Fusconaia 111 escambiensis. Procambarus 95 eschariferus, Bulimulus 126 ESCHRICHTIIDAE 129, 225 Eschrichtius 129, 225 esculentus, Echinus 169 esculentus, Oreochromis 85 esperanza, Papilio 105 esperi, Fagotia 212 espiritosantensis, Tadarida 139 estor, Prognathochromis 184 Estrilda 57, 163 ESTRILDIDAE 57, 163 ethelae, Phylolestes 108 Etheostoma 83, 169, 184, 206, 247 etigo, Mogera 8 Eua 127 euaconthus, Arctodiaptomus 91 Euastacus 96 Euathlus 169 Eubalaena 18, 129, 225 euboicus, Barbus 71 Eubucco 154 Eucerceris 251 Euchloe 253 Euchondrus 124 Euchoreutes 23 euchrysea, Tachycineta 157 **EUCNEMIDAE 249** EUCONULIDAE 124, 190, 215, 245 eucosma, Charitospiza 162 Eucrenonaspides 90 Eucyclogobius 87 Eudiaptomus 207

Eudiscopus 138 Eudontomyzon 69, 167, 201 Eudyptes 29 eugeniae, Ptilinopus 151 eugenii, Macropus 220 eugenii decres, Macropus 220 eugenii derbianus, Macropus 220 eugenii eugenii, Macropus 220 eugenii, Macropus 220 euglypta, Glyptorhagada 122 Euhadra 213, 239 Eulamprus 60, 234, 246 Eulemur 13, 14, 220, 241, 245 Eulidia 43 eulima, Cecilioides 124 eulo, Jardinella 116 Eulonchus 250 eulophotes, Egretta 31 **EUMASTACIDAE 108** Eumeces 60, 165 Eumetopias 17 Eumops 13, 139 Eumorsea 108 Eumyias 158 eungella, Euastacus 96 eungellensis, Taudactylus 67 Eunice 209 Eunicella 128 **EUNICIDA 209 EUNICIDAE 209** eunus eunus, Pseudocopaeodes 252 Eunymphicus 40 Euonyma 128 euops, Aratinga 40 Euoticus 139 eupator, Euploea 244 **EUPELMIDAE 251** Eupelmus 251 Eupetaurus 22 **EUPHAEIDAE 238** Eupherusa 43 Euphilotes 252 euphon, Euploea 104 Euphonia, Green-chinned 162 Euphonia 162 euphratica, Allactaga 143 euphraticus, Rafetus 66 Euphydryas 253 Euplectes 164 Eupleres 18 Euploea 104, 170, 171, 237, 244 euploeomorpha, Tirumala 105 Eupodotis 37, 150 Eupractus 68 Euproserpinus 105, 254 Eupsophus 67, 201 Euptilotis 44 Eurapteryx 179 eurasius, Stenobothrodes 108 eurhythmus, Ixobrychus 147 Euro, Barrow Island 220 europa tamuna, Lethe 253 europaeus, Mesoplodon 196 europaeus, Phylladactylus 59 Euroscaptor 8 Eurostopodus 43 euroxestus, Tengchiena 215

euryale, Rhinolophus 10 Eurycea 68 Euryceros 157 eurycerus eurycerus, Tragelaphus 230 eurycerus isaaci, Tragelaphus 230 eurycerus, Tragelaphus 141 eurydice fumosa, Satyrodes 253 **EURYLAIMIDAE 45** Eurylaimus 45 Eurynorhynchus 37 eurynotus, Neonemobius 133 Eurypegasus 205, 236 Euryphura 253 euryprora, Hedylepta 186 eurystoma, Gambusia 80 eurystomus, Satan 75 Eurytides 105, 253 euryura, Rhipidura 160 Euscarthmus 47 Euscheman 252 Eusthenia 209, 254 EUSTHENIIDAE 209, 254 euterpe, Euproserpinus 254 Euthalia 253 eutheca, Hirasea 214 Eutrichomyias 50 Eutriorchis 33 eutropia, Cephalorhynchus 195 Euxanthe 253 euzyga, Semotrachia 122 evandaleana, Cupedora 122 Evarra 183 evelvnae, Carelia 189 Everes 252 everetti, Aceros 44 everetti, Dicaeum 161 everetti, Ixos 157 everetti, Melogale 17 everetti, Monarcha 51 everetti, Turnix 35 everetti, Urogale 8 everetti, Zoothera 161 eversmanni amurensis, Mustela 224 eversmanni, Columba 38 evezardi, Indoreonectes 203 evoronensis, Microtus 25 evotis, Tonatia 137 exanimus, Kimboraga 122 exaula, Margaronia 253 excavatus, Somatogyrus 212 excella, Cryptochia 255 excellens, Campylopterus 153 excellens, Lovenula 92 excelsa, Grallaria 155 excelsus, Sorex 193 excisa, Gyrotonia 117 exigua, Anomala 250 exigua, Jardinella 116 exigua, Partula 191 exilis, Arganiella 114 eximia, Anomala 250 eximia, Bleda 48 Eximiorhagada 214 eximius ssp., Cyprinodon 247 eximius, Phylloscartes 156 exocoeti, Ramphotyphlops 62 exoleta, Dobsonia 136

exoptata, Mandarina 214 expansa, Auriculella 188 expansa, Podocnemis 132 expansilabris mattolensis, Helminthoglypta 239 expansioma, Chamalychaeus 213 expansus, Diplodon 110 expatria Boroda 87 exquisita, Melanotaenia 204 exquisita, Omphalotropis 256 exquisitus, Coturnicops 36 exsul, Bufo 66 exsul, Dicrostonyx 197 exsul, Epinephelus 206 exsul, Psittacula 181 extensa, Menidia 78 extensus, Cottus 82 extincta, Neduba 187 extraneus, Cambarus 93 exulans, Diomedea 30 exulatus, Chilonopsis 191 Eye, Higgin's 111 ezoin, Boninagrion 106 faba, Partula 191 fabalis, Villosa 256 faberi, Leptothorax 100 Fabriciana 253 fabula, Pegias 111 facta, Micrarionta 125 fagani, Lepus 197 fagani, Prunella 158 Fagotia 212 fairbanksensis, Pyrgulopsis 211 fairburni, Anagotus 248 Fairywren, Broad-billed 159 Fairywren, Campbell's 198 Fairywren, Purple-crowned 159 Falanouc 18 falcata, Ptilocichla 52 falcatus, Phyllops 137 falcatus, Tropodiaptomus 207 falcipennis, Dendragapus 149 falcirostris, Sporophila 55 falcirostris, Xiphocolaptes 45 Falco 33, 34, 149, 179 Falcon, Grey 33 Falcon, New Zealand 149 Falcon, Orange-breasted 149 Falcon, Red-necked 149 Falcon, Taita 33 Falcon, White-rumped 149 falconeri falconeri, Capra 228 falconeri heptneri, Capra 228 falconeri megaceros, Capra 228 falconeri, Capra 21 Falconet, Pied 149 Falconet, White-fronted 149 FALCONIDAE 33, 149, 179, 242 FALCONIFORMES 32, 147, 179, 198, fallai, Deinacrida 108 fallai, Oligosoma 165 fallax fallax, Chaetodipus 231 fallax pallidus, Chaetodipus 231 fallax, Alosa 202 fallax, Beddomeia 114 fallax, Crunomys 23

Fallicambarus 94 Falniowskia 173 falsus, Ameletus 250 familiare, Apalopteron 54 familiaris, Acrocephalus 49 famulus, Mus 25 Fan, Broad Sea 128 Fan-shell, Western 110 fanalensis, Lauria 127 faniensis, Myrmica 101 fanovanae, Newtonia 51 Fanshell 110 Fantail, Cinnamon-tailed 160 Fantail, Dusky 160 Fantail, Kadavu 160 Fantail, Long-tailed 160 Fantail, Malaita 52 Fantail, Manus 52 Fantail, Matthias 199 Fantail, Tawny-backed 160 Fantail, White-bellied 160 fardoulisi, Melonycteris 9 farleri, Lanistes 114 farquhari, Todirhamphus 44 Farula 255 fasciata taeniata, Nerodia 246 fasciata, Agrotis 186 fasciata, Galidictis 16 fasciata, Neothraupis 162 fasciatum, Tigrisoma 147 fasciatus albipilis, Lagostrophus 220 fasciatus fasciatus, Lagostrophus 220 fasciatus, Aphanius 205 fasciatus, Brachylophus 59 fasciatus, Cambarus 93 fasciatus, Lagostrophus 4 fasciatus, Myrmecobius 3 fasciatus, Sebastes 82 fascicularis, Macaca 140 fasciculispina, Rana 201 fasciinucha, Falco 33 fascinans, Elimia 117 fasciolatus, Circaetus 148 fasciolatus, Mixophyes 167 fastigata, Lamprocystis 215 fastuosa, Tangara 55 fastuosus, Epimachus 58 Fatmucket, Arkansas 111 Fatmucket, Waccamaw 172 fatrense, Deroceras 215 faunulus, Pteropus 9 fausta, Actinella 174 Fawnsfoot, Mexican 255 feae, Pterodroma 30 feae, Turdus 53 feai feai, Muntiacus 227 feai rooseveltorum, Muntiacus 227 feai, Muntiacus 197 featherstoni, Phalacrocorax 31 federensis, Tropocyclops 92 fedtschenkoi, Pseudoscaphirhynchus 70 Felexamia 251 feliceus, Rattus 26 FELIDAE 16, 140, 195, 223, 241 felina, Lutra 17 felipei, Mustela 17 Felis 195, 223, 241

fellowsgordoni, Suncus 8 fellowsi, Melomys 25 Felovia 27 feltini, Microtus 144 femoralis, Cinnyricinclus 57 femoralis, Presbytis 140 fenderi, Rhyacophila 255 fenderi, Soliperla 254 Fennecus 195 Fenouilia 118 feralis, Micrarionta 125 ferdebueni, Poblana 205 Feresa 195 Ferminia 49 fernandensis, Sephanoides 43 fernandesi, Teinsotoma 209 fernandezi, Lonchorhina 11 fernandinae, Colaptes 44 fernandinae, Nesoryzomys 178 Fernwren 159 feroculus, Feroculus 7 Feroculus 7 ferox, Cryptoprocta 18 ferraria, Leiostyla 127 ferreorostris, Chaunoproctus 182 Ferreret 66 Ferret, Black-footed 177 Ferret-badger, Javan 224 Ferret-badger, Kinabalu 17 Ferrissia 113 ferrugineifrons, Bolborhynchus 40 ferrugineus, Pleuronectes 88 ferrugineus, Coccyzus 42 ferrugineus, Deronectes 98 ferrugineus, Phaenomys 26 ferrugineus, Procambarus 95 ferrumequinum, Rhinolophus 129 ferus przewalskii, Equus 225 FERUSSACIIDAE 124, 215 fiber birulai, Castor 245 fiber, Castor 142 fibratus, Placostylus 126 Fibulacamptus 96 Ficedula 50, 158 ficedulinus, Zosterops 54 ficulnea, Pupilla 175 fidelis minor, Monodenia 239 fidelis pronotis, Monadenia 239 fieldi, Pseudomys 26 Fig-parrot, Salvadori's 41 Figbird, Wetar 199 filfolensis filfolensis, Podarcis 246 filiceti, Philonesia 125 filicicola, Nesorestias 251 filicum, Heteromphus 248 filicum, Leiostyla 127 filosa, Partula 127 filosa, Rhodacme 113 fimbriata, Phrynomedusa 201 fimbriatus, Artibeus 137 fimbriatus, Eoglaucomys 142 fimbriatus, Myotis 194 finalis, Agathothoma 213 Finch, Black-masked 54 Finch, Canary-winged 162 Finch, Coal-crested 162

Finch, Cocos 55

Finch, Gouldian 57 Finch, Laysan 56 Finch, Mangrove 54 Finch, Nihoa 56 Finch, Peg-billed 162 Finch, Slender-billed 55 Finch, St Lucia Black 162 Finch, Star 57 Finch, Townsend's 182 Finch, Yellow-billed Blue 163 Finch, Yellow-green 55 findleyi, Myotis 12 Finfoot, Masked 37 finschi, Amazona 151 finschii, Ducula 151 Fire-eye, Fringe-backed 46 Fireback, Crested 35 Fireback, Crestless 35 Fireback, Siamese 35 Firecrown, Juan Fernández 43 Firefinch, Mali 163 Firefly, Everglades Browing 249 Firefly, Florida Intertidal 249 Firetail, Red-eared 163 Firethroat 159 firouzi, Allactaga 23 fischerae, Rhinophylla 137 fischeri, Agapornis 151 fischeri. Crocidura 6 fischeri, Haplonycteris 9 fischeri, Lepidostoma 254 fischeri, Somateria 32 fischeri, Tauraco 152 Fish, African Blind Barb 71 Fish, Orange Lake Cave 95 Fish-eagle, Grey-headed 148 Fish-eagle, Lesser 148 Fish-eagle, Madagascar 33 Fish-eagle, Sanford's 33 Fish-owl, Blakiston's 42 Fish-owl, Tawny 152 fisheri, Labeo 72 fisheri, Rana 182 Fishing-owl, Rufous 42 fiskii, Lamprophis 61 Fissi 86 Fissilicreagris 89 Fissuria 116 fitzpatricki, Procambarus 95 fitzroyana, Mesodontrachia 174 flagellatus, Stygobromus 89 flagellum ruddocki, Masticophis 246 Flagtail, Spotted 244 Flamingo, Andean 31 Flamingo, Lesser 147 Flamingo, Puna 31 flammea, Hemitremia 202 flammea, Littoraria 188 flammea, Paroreomyza 181 Flatback 63 flava, Monardithemis 107 flava, Tilapia 86 flavescens, Ariteus 11 flavescens, Crocidura 6 flavescens, Eptesicus 194 flavescens, Varanus 243 flavicans, Foudia 57

flavicapilla, Chloropipo 156 flavicauda masakii, Coeliccia 238 flavicauda, Lagothrix 15 flaviceps, Atlapetes 54 flaviceps, Callithrix 14 flaviceps, Rhodacanthis 181 flavicollis, Macronyx 157 flavidulum, Pleurobema 111 flavifrons, Amblyornis 164 flavifuscus, Puntius 74 flavigula robinsoni, Martes 224 flavigula, Serinus 57 flavigularis, Lepus 28 flavimaculata, Graptemys 64 flavipennis, Chloropsis 48 flavipes, Ketupa 152 flavipes, Malimbus 57 flavipinnis, Glossgobius 87 flavipinnis, Noturus 75 flavipinnis, Prognathochromis 184 flavipinnis, Stupidogobius 87 flaviprymna, Lonchura 163 flavipunctata, Litoria 66 flavirostris, Humblotia 50 flavirostris, Paradoxornis 51 flavirostris, Phibalura 156 flaviventris, Saccolaimus 136 flavocoronatus, Chaetodon 84 flavomarginata, Cuora 64 flavomarginatus, Gopherus 65 flavovelata, Geothlypis 163 flavovirens, Chlorospingus 54 flavoviridis, Neomixis 159 flavus, Agelaius 56 flavus, Brachycercus 250 flavus, Speleomantes 68 flavus, Zosterops 161 Flea, Water 90, 91 fleayi, Mixophyes 67 fleckeri, Euastacus 96 flectocercus, Ixalodectes 109 Fletcherana 252 fletcheri, Lechriodus 167 flexa, Paramelita 90 flexicolumella, Hemistoma 116 flexuosa, Dysnomia 187 flexuosa, Epioblosma 110 Flicker, Cuban 44 Floater, Brook 255 Floater, California 255 Floater, Green 172 florensis, Corvus 58 florensis, Spelaeomys 178 florentina curtisi, Dysnomia 255 florentina curtisi, Epioblasma 238 florentina florentina, Dysnomia 255 florentina walkeri, Dysnomia 255 florentina, Epioblasma 209 Florican, Bengal 37 Florican, Lesser 37 floriceps, Anthocephala 153 florida, Oxyethira 254 floridalis, Anaea 253 floridana smalli, Neotoma 233 floridana, Ceraclea 254 floridana, Dexteria 91 floridana, Micronaspis 249

flavicans, Prioniturus 152

floridana, Trigonopelastes 250 floridanus, Podomys 26 floridensis, Asaphomyia 250 floris, Treron 151 flosculus, Loriculus 41 flosculus, Quintalia 190 Flounder, Yellowtail 88 Flower-piercer, Chestnut-bellied 162 floweri, Crocidura 6 floweri, Eptesicus 138 floweri, Gerbillus 24 Flowerpecker, Brown-backed 161 Flowerpecker, Cebu 53 Flowerpecker, Flame-crowned 161 Flowerpecker, Scarlet-collared53 Flowerpecker, Visayan 53 Flowerpecker, Whiskered 53 Flowerpecker, White-throated 161 Flowerpiercer, Venezuelan 54 Flufftail, Slender-billed 37 Flufftail, White-winged 37 fluminea, Melanatria 173 fluminensis, Myrmotherula 46 Fluminicola 211 fluvialis, lo 118 fluviatilis, Lampetra 167 fluviatilis, Neogobius 206 fluviatilis, Prinia 199 fluviatilis, Sotalia 196 fluviatillis, Craterocephalus 78 Fluviopupa 173 Fly, Belkin's Dune Tabanid 99 Fly, Brown Merycomyian Tabanid 250 Fly, Delong's Flower 250 Fly, Florida Asaphomyian Tabanid 250 Fly, Hawaiian Dance 250 Fly, Mary Alice's Small-headed 250 Fly, Nihoa Two-spotted Asterid 250 Fly, Ross's Apatalestes Tabanid 250 Fly, Sugarfoot Moth 99 Fly, Texas Asaphomyian Tabanid 250 Fly, Valley Mydas 250 Fly, Volutine Stoneyian Tabanid 185 Fly, Wilber Springs Shore 250 Flycatcher, Ashy-breasted 51 Flycatcher, Atlantic Royal 47 Flycatcher, Belted 156 Flycatcher, Biak 159 Flycatcher, Black-and-rufous 158 Flycatcher, Black-banded 158 Flycatcher, Black-billed 156 Flycatcher, Blue-breasted 158 Flycatcher, Brown-breasted 159 Flycatcher, Chapin's 51 Flycatcher, Cocos 47 Flycatcher, Cryptic 50 Flycatcher, Damar 50 Flycatcher, Dull-blue 158 Flycatcher, Furtive 50 Flycatcher, Grand Comoro 50 Flycatcher, Grey-breasted 47 Flycatcher, Guam 181 Flycatcher, Kashmir 50 Flycatcher, Little Slaty 50 Flycatcher, Lompobattang 50 Flycatcher, Matinan 50 Flycatcher, Nilgiri 158 Flycatcher, Nimba 51

Flycatcher, Ochre-tailed 159 Flycatcher, Orange-banded 156 Flycatcher, Pacific Royal 47 Flycatcher, Palawan 50 Flycatcher, Pileated 156 Flycatcher, Rufous-throated 158 Flycatcher, Samoan 51 Flycatcher, Sumba 158 Flycatcher, Sumba Brown 199 Flycatcher, Tawny-chested 156 Flycatcher, Ward's 160 Flying-fox, Ambon 136 Flying-fox, Chuuk 9 Flying-fox, Comoro Black 9 Flying-fox, Gilliard's 9 Flying-fox, Greater Mascarene9 Flying-fox, Lesser 9 Flying-fox, Little Golden-mantled9 Flying-fox, Marianas 9 Flying-fox, Mortlock Islands 9 Flying-fox, Okinawa 177 Flying-fox, Pemba 10 Flying-fox, Pohnpei 9 Flying-fox, Rodrigues 9 Flying-fox, Ryukyu 9 Flying-fox, Samoa 9 Flying-fox, White 241 Flying-squirrel, Small Japanese242 Flyrobin, Golden-bellied 159 Fody, Mauritius 57 Fody, Reunion 182 Fody, Rodrigues 57 Fody, Seychelles 57 faersteri, Henicaphaps 151 Foliage-gleaner, Alagoas 45 Foliage-gleaner, Chestnut-capped 155 Foliage-gleaner, Henna-hooded45 Foliage-gleaner, Rufous-necked45 Foliage-gleaner, Russet-mantled 155 Foliage-gleaner, White-browed 155 foliifera, Gulella 216 foliniana, Platyla 113 folkertsi, Hydroporus 248 folliculata, Elliptio 172 Fonscochlea 116, 173 fontaineanus, Diplodon 110 fontanierii, Myospalax 25 fontanus, Galaxias 76 fonticala, Etheostoma 83 Fontigens 116, 211 fontinalis, Cyprinodon 79 fontinalis, Hygrotus 248 foramenus, Turgenitubulus 122 foramineus, Rattus 144 forbesi, Amastra 188 forbesi, Curaeus 56 forbesi, Nesopupa 216 fordi, Aphodius 250 foreli, Strongylognathus 102 foremani, Pleurocera 118 Forest-Falcon, Buckley's 242 Forest-falcon, Plumbeous 34 Forest-partridge, Udzungwa 35 Forest-rail, Mayr's 198 Forest-rail, White-striped 198 Forester, Scarce Red 253 Forkshell 187 formanii, Anculasa 188

formanii, Leptoxis 118 Formica 100, 170 FORMICARIIDAE 45, 155, 198 Formicarius 45 FORMICIDAE 99, 170 Formicivora 45, 46, 155 Formicoxenus 100 formosa, Amandava 57 formosa, Anas 32 formosa, Cyprinella 71 formosa, Leptoxis 118 formosa, Nilssonia 66 formosa, Partula 191 formosa, Sitta 53 formosae, Treron 151 formosanus, Oncorhynchus 77 formosus bartelsi, Myotis 245 formosus, Garrulax 159 formosus, Neutrodiaptomus 207 formosus, Otomops 13 formosus, Scleropages 70 formosus, Spelaeornis 160 Forpus 40 forresti, Leggadina 143 forresti, Ochotona 146 forresti, Sciurotamias 22 farstenii, Indotestudo 65 forthensis, Beddomeia 114 fortidens, Myotis 138 fortis, Coracina 48 fartis, Pacifastacus 93 fasbergi, Opanara 123 fosbergi, Tubuaia 125 Fossa 18 fossa, Fossa 18 Fossa 18 fossilis, Misgurnis 168 Foudia 57, 182 fourchensis, Plethodon 167 fowleri, Celestus 199 Fox, Bengal 195 Fox, Blanford's 195 Fox, Corsac 195 Fox, Fennec 195 Fox, Island Grey 129 Fox, Pale 195 Fox, Ruppell's 195 Fox, Swift 129 foxi, Crocidura 6 foxi, Cryptomys 145 foxi, Dasymys 143 fraenata, Onychogalea 4 fragilion, Megalobulimus 126 fragilis stochi, Hadzia 237 fragilis, Omphalotropis 210 fragilis, Samoana 127 fragosa, Quadrula 112 francesae, Skiffia 184 franci, Elaphoidella 96 francica, Collocalia 153 francoisi, Trachypithecus 15 Francolin, Djibouti 35 Francolin, Grey-striped 34 Francolin, Harwood's 35 Francolin, Mount Cameroon 34 Francolin, Nahan's 198 Francolin, Swamp 35

Francolin, Swierstra's 35 Francolinus 34, 35, 198 franklandensis, Beddomeia 114 franzi, Procambarus 95 fraseri, Oreomanes 162 frater, Myotis 138 frater, Onychognathus 57 fraterculus, Artibeus 11 fraterculus, Melomys 144 fraterculus, Miniopterus 138 fraternum, Elliptio 110 fratrorum, Bunomys 143 fredericae, Presbytis 194 Fregata 31 FREGATIDAE 31 Fregilupus 182 frenatum, Cycloderma 166 frenatus, Chaetops 158 frenatus, Lichenostomus 162 freycineti, Myiagra 181 Friar, Comoro 104 Friar, Madagascan 104 Friar, Mauritian 104 Friarbird, Brass's 199 Friarbird, Dusky 199 Friarbird, Grey 199 Friarbird, Plain 162 Frigatebird, Ascension 31 Frigatebird, Christmas Island 31 frigatensis, Nysius 251 Fringilla 132 fringillaris, Spizocorys 48 FRINGILLIDAE 56, 132, 163, 182, 199 fringillinus, Parus 161 frisii, Rutilus 203 frisoni, Ceratella 250 Fritillary, Corsican 253 Fritillary, False 170 Fritillary, Lesser False 170 Fritillary, Myrtle's 253 Fritillary, Regal 253 Fritillary, Scarce 208 frivola, Kusaiea 215 frobesi, Nesithmysus 248 Frog, Amoured 66 Frog, Archey's 167 Frog, Baw-baw 67 Frog, Bleating Tree 243 Frog, Cape Rain 67 Frog, Corroboree 67 Frog, Desert Rain 67 Frog, Doichang 201 Frog, Drakensberg 167 Frog, Eungella Torrent 67 Frog, European Tree 166 Frog, Fijian Ground 67 Frog, Fleay's 67 Frog, Fletcher's 167 Frog, Gardiner's Seychelles 68 Frog, Gastric Brooding 67 Frog, Golden Coqui 201 Frog, Golden Dwarf Reed 243 Frog, Goliath 67 Frog, Great Barred 167 Frog, Green and Golden Bell 166 Frog, Green-thighed 166 Frog, Hamilton's 66 Frog, Hewitt's Ghost 66

Frog, Hochstetter's 243 Frog, Hogsback 167 Frog, Holst's 67 Frog, Illinois Chorus 246 Frog, Ishikawa's 67 Frog, Israel Painted 182 Frog, Italian Agile 167 Frog, Kohchang 201 Frog, Lake Junin 67 Frog, Lesueur's 243 Frog, Liem's 67 Frog, Long-toed Tree 66 Frog, Micro 67 Frog, Mt Glorius Torrent 67 Frog, Namiye's 68 Frog, Nyakala 66 Frog, Otton 68 Frog, Pearson's 66 Frog, Peppered Tree 66 Frog, Pickersgill's Reed 66 Frog, Pine Barrens Tree 166 Frog, Pleione's Torrent 67 Frog, Relict Leopard 68 Frog, Seychelle Islands Tree 66 Frog, Seychelles 68 Frog, Sharp-nosed Torrent 67 Frog, Smith's Wrinkled 201 Frog, Somuncura 67 Frog, Southern Barred 67 Frog, Southern Bell 66 Frog, Southern Gastric Breeding 67 Frog, Spiny-breasted Giant 201 Frog, Spotted 66 Frog, Stuttering 67 Frog, Table Mountain Ghost 66 Frog, Thomasset's Seychelles 68 Frog, Tinkling 67 Frog, Torrent Tree 66 Frog, Tusked 167 Frog, Vegas Valley Leopard 182 Frog, Water 243 Frog, Western Spotted 167 Frog, Whistling Tree 235, 243 Frog, White-bellied 67 Frog, Yellow-bellied 67 Frog, Yellow-spotted Tree 66, 243 froggatti, Cinetodus 204 Frogmouth, Bornean 198 Frogmouth, Dulit 198 Frogmouth, Javan 153 Frogmouth, Large 198 Frogmouth, Short-tailed 198 Frogmouth, Sri Lanka 153 fromensis, Beddomeia 114 frondicella, Pronesopupa 216 frontale, Cinclidium 158 frontalis, Anarhynchus 37 frontalis, Atelerix 241 frontalis, Bos 20 frontalis, Pipreola 156 frontalis, Sporophila 55 frontalis, Stenella 196 frontata, Presbytis 194 fronto, Kunsia 24 frosti, Neopteryx 9 frosti, Philoria 67 frosti, Serica 250 frugivorus, Calyptophilus 54

Fruit-dove, Atoll 151 Fruit-dove, Black-banded 151 Fruit-dove, Blue-capped 151 Fruit-dove, Carunculated 39 Fruit-dove, Cook Islands 151 Fruit-dove, Cream-bellied 151 Fruit-dove, Flame-breasted 39 Fruit-dove, Henderson 39 Fruit-dove, Makatea 39 Fruit-dove, Mariana 151 Fruit-dove, Negros 39 Fruit-dove, Rapa 39 Fruit-Dove, Red-moustached 180 Fruit-dove, Red-naped 39 Fruit-dove, Tanna 151 Fruit-dove, White-headed 151 Fruiteater, Black-chested 156 Fruiteater, Fiery-throated 156 Fruiteater, Scaled 156 Fruiteater, Scarlet-breasted 156 fuchsi, Belgrandiella 115 fuchsi, Orcula 175 fucosa, Tangara 163 fuertesi, Hapalopsittaca 41 fulgens, Achatinella 120 fulgens, Ailurus 18 fulgida, Meda 72 fulgidus, Psittrichas 41 fulgurans, Perdicella 188 fulgurata, Ampelita 120 Fulica 36, 180 fuliginosa, Psalidoprocne 157 fuliginosus fuliginosus, Macropus 220 fuliginosus, Aegithalos 161 fuliginosus, Hipposideros 136 fuliginosus, Larus 38 fuliginosus, Otus 42 fuliginosus, Sminthopsis 193 fullawayi, Hedylepta 186 fullerkati, Lampsilis 172 fulminans, Tadarida 139 fultoni, Beddomeia 114 fultoni, Pisidium 173 fulva, Heteropoma 210 fulva, Vernaya 27 fulvescens, Acipenser 70 fulvescens, Picumnus 45 Fulvetta, Gold-fronted 49 Fulvetta, Rufous-throated 158 Fulvetta, Spectacled 158 Fulvetta, Yellow-throated 158 fulvicollis, Treron 151 fulvicrus, Ectemnius 251 fulviventer goldmani, Sigmodon 233 fulviventer, Tylomys 145 fulvorufula adamauae, Redunca 230 fulvorufula chanleri, Redunca 230 fulvorufula fulvorufula, Redunca 230 fulvorufula, Redunca 131 fulvus albifrons, Eulemur 241 fulvus albocollaris, Eulemur 220 fulvus collaris, Eulemur 220 fulvus fulvus, Eulemur 241 fulvus mayottensis, Eulemur 245 fulvus rufus, Eulemur 241 fulvus sanfordi, Eulemur 220 fumeus, Pseudomys 26

fumosa, Crocidura 6 fumosus, Heimyscus 242 fumosus, Pappogeomys 142 fundatus, Pteropus 9 Fundulus 80, 183, 243 funebris, Todirhamphus 154 funerea, Drepanis 181 funerea, Rhinoclemmys 166 funereus, Morimus 98 funicula, Gonospira 245 funiculatum, Teinsotoma 209 Funisciurus 22, 142 funium, Torresitrachia 174 furax, Emballonura 10 furcatus, Hemitriccus 47 furcatus, Pseudomugil 243 furcifer electromontis, Phaner 220 furcifer furcifer, Phaner 220 furcifer pallescens, Phaner 220 furcifer parienti, Phaner 220 furcifer, Phaner 139 Furcifer 59 furculus, Triaenops 11 Furina 62 furiosus, Noturus 203 FURIPTERIDAE 11 FURNARIIDAE 45, 155 furness, Silurus 203 furnessi, Pentalagus 29 furva, Leptaxis 125 furva, Mogurnda 87 furvum, Pleurobema 111 furvus, Palawanomys 25 fusca clamitans, Alouatta 221 fusca fusca, Alouatta 221 fusca, Alouatta 14 fusca, Aplonis 182 fusca, Himeroconcha 214 fusca, Leiostyla 245 fusca, Murina 194 fusca, Phoebetria 146 fuscata yakui, Macaca 245 fuscata, Macaca 15 fuscata, Newnhamia 98 fuscata, Padda 163 fuscatus, Marmosops 135 fuscicapillus, Corvus 164 fuscicapillus, Philemon 199 fusciceps fusciceps, Ateles 221 fusciceps robustus, Ateles 221 fusciceps, Ateles 14 fuscicollis crandalli, Saguinus 221 fuscicollis cruzlimai, Saguinus 221 fuscicollis leucogenys, Saguinus 241 fuscidula, Leiostyla 216 fuscigularis, Apalis 49 fuscipennis, Dicrurus 57 fuscipes annectens, Neotoma 233 fuscipes luciana, Neotoma 233 fuscipes riparia, Neotoma 233 fuscipes, Neotoma 25 fuscobasis, Achatinella 120 Fusconaia 111, 172 fuscoolivaceus, Atlapetes 162 fuscopalliata, Brachythemis 107 fuscorufa, Rhipidura 160 fuscorufa, Synallaxis 155

fuscorufus, Myiotheretes 156 fuscozonata, Aaadonta 214 fuscus insubricus, Pelobates 235 fuscus, Ancharius 203 fuscus, Eleutherodactylus 67 fuscus, Galaxias 76 fuscus, Hippocampus 81 fuscus, Lamprophis 165 fuscus, Lasiopodomys 143 fuscus, Liolaemus 199 fuscus, Miniopterus 12 fuscus, Moschus 141 fuscus, Neohydromys 25 fuscus, Notomys 25 fusea, Partula 191 fusiformis, Elimia 117 fusoidea, Partulina 213 gabbi, Micrarionta 215 gabbii, Bassaricyon 140 gabela, Prionops 49 gabela, Sheppardia 52 gabriellae, Hylobates 194 GADIDAE 77 **GADIFORMES 77** Gadus 77 Gag 83 gaigeae, Paratelmatobius 243 gaigeae, Trachemys 64 gaigei, Gambusia 80 gaimardi cuniculus, Bettongia 219 gaimardi gaimardi, Bettongia 219 gaimardi, Bettongia 135 gaimardi, Phalacrocorax 147 Galago, Allen's 139 Galago, Amani Dwarf 194 Galago, Grant's Dwarf 194 Galago, Lesser Needle-clawed 139 Galago, Matundu Dwarf 194 Galago, Rondo Dwarf 194 Galago, Small-eared Greater 139 Galago, Somali 139 Galago, Thomas's Dwarf 241 Galago, Western Needle-clawed 139 Galago, Zanzibar 139 Galago 139 Galagoides 194, 241 GALAGONIDAE 139, 194, 241 galapagoensis, Arctocephalus 17 galapagoensis, Buteo 33 galapagoensis, Oryzomys 25 galapagosensis, Ogilbia 204 Galaxias, Barred 76 Galaxias, Cape 168 Galaxias, Chathams 76 Galaxias, Clarence 76 Galaxias, Dwarf 77 Galaxias, Flat-Headed 76 Galaxias, Pedder 76 Galaxias, Saddled 77 Galaxias, Swamp 204 Galaxias, Swan 76 Galaxias 76, 77, 168, 204 Galaxiella 77, 168 GALAXIIDAE 76, 168, 204 galbanus, Garrulax 159

GALBULIDAE 44 galeata, Ducula 39 galeata, Lemniscia 215 galeatus, Basilornis 164 galeatus, Dryocopus 45 galeboides, Thermodiaptomus 92 Galemys 8 galericulata, Aix 147 galeritus "sanjei", Cercocebus 222 galeritus chrysogaster, Cercocebus 222 galeritus galeritus, Cercocebus 222 galeritus, Cercocebus 140 Galidictis 16, 17 galilaea, Pene 124 galileus "Ejagham", Sarotherodon 236 gallagheri, Chaerephon 13 gallardoi, Podiceps 146 gallarum, Galago 139 Gallicolumba 39, 151 GALLIFORMES 34, 149, 180, 198 Gallinago 37, 150 Gallinula 36 Gallirallus 36, 149, 180 Galliwasp, Jamaica Giant 182 Galliwasp, Monsterrat 59 galloi, Polyommatus 103 Gallotia 60 Gallus 149 galusdae, Cheirodon 203 Gambelia 60 gambianus, Mungos 195 gambieri, Todirhamphus 44 Gambusia, Amistad 184 Gambusia, Big Bend 80 Gambusia, Clear Creek 80 Gambusia, Pecos 80 Gambusia, San Marcos 184 Gambusia 80, 168, 184, 205 gamelia, Euploea 170 GAMMARIDAE 90, 185 Gammarus 90, 185 gammoni, Stenelmis 99 ganesa loomisi, Panchala 252 gangetica, Platanista 19 gangeticus, Gavialis 58 gangeticus, Glyphis 69 Gannet, Cape 146 ganslmayri, Belgrandiella 115 ganteri, Palaemonias 93 gaoligongensis, Ochotona 197 gapperi solus, Clethrionomys 232 garamantis, Parantica 104 Garda, Carpione del 77 gardineri, Sooglossus 68 Garfish, Allen's River 205 Garfish, Robert's River 243 garleppi, Papilio 208 garleppi, Poospiza 55 garmani, Characodon 184 garnettii, Otolemur 139 garnieri, Bythiospeum 115 garnotii, Pelecanoides 30 Garra, Philipps' 202 Garra 72, 202 garretti, Partula 191 garridoi, Mysateles 28 Garrulax 50, 159, 198

galbinifrons, Cuora 165

Galbula 44

garrulus, Lorius 41 Garrulus 58 gaskelli, Hesperoptenus 12 gasparoi, Metacyclops 92 GASTEROSTEIDAE 81, 247 GASTEROSTEIFORMES 81, 205, 236, Gasterosteus 247 Gastrocopta 127, 191 GASTROPODA 112, 133, 173, 187, 209, 238, 244, 256 gasulli, Helicella 174 gatliffi, Pernagera 123 gaudichaudii, Littoridina 188 Gaur 20 Gaurachromis 85, 184 gautama, Tirumala 244 **GAVIALIDAE 58** Gavialis 58 gazella acaciae, Gazella 228 gazella beisa, Oryx 229 gazella callotis, Oryx 229 gazella cora, Gazella 228 gazella farasani, Gazella 228 gazella gazella, Gazella 228 gazella gazella, Oryx 229 gazella muscatensis, Gazella 228 gazella, Gazella 130 gazella, Oryx 131 Gazella 21, 130, 141, 178, 228 Gazelle, Acacia 228 Gazelle, Arabian 178 Gazelle, Arabian Mountain 228 Gazelle, Arabian Sand 228 Gazelle, Cuvier's 21 Gazelle, Dama 21 Gazelle, Dorcas 141 Gazelle, Farasan 228 Gazelle, Goitred 141 Gazelle, Grant's 130 Gazelle, Heuglin's 228 Gazelle, Mongalla 228 Gazelle, Mongolian 141 Gazelle, Mountain 130 Gazelle, Muscat 228 Gazelle, Palestine Mountain 228 Gazelle, Pelzein's 228 Gazelle, Przewalski's 21 Gazelle, Queen of Sheba's 21 Gazelle, Red 178 Gazelle, Red-fronted 21 Gazelle, Saudi 178 Gazelle, Slender-horned 21 Gazelle, Soemmerring's 21 Gazelle, Speke's 21 Gazelle, Thomson's 130 Gazelle, Tibetan 141 geata, Myosorex 7 geayi, Bedotia 204 **GECARCINUCIDAE 95** Gecko, Black-eyed 165 Gecko, Duvaucel's 243 Gecko, Gold-striped 243 Gecko, Harlequin 165 Gecko, Hawequa Flat 165 Gecko, Kuroiwa's Ground 59 Gecko, Methuen's Dwarf 59 Gecko, Monito 59

Gecko, Muller's Velvet 165 Gecko, Namaqua Day 165 Gecko, Paraguanan Ground 59 Gecko, Peringueyi's Leaf-toed 199 Gecko, Rodrigues Day 182 Gecko, Rough 243 Gecko, Round Island Day 59 Gecko, Scarce Ground 199 Gecko, Serpent Island 59 Gecko, Small-scaled Leaf-toed 165 Gecko, Standing's Day 59 Gecko, Stephen's Island 59 geei, Trachypithecus 194 geelvinkiana, Micropsitta 152 geertsi, Caecobarbus 71 gejiuensis, Triplophysa 75 Gekko, European Leaf-toed 59 GEKKONIDAE 59, 165, 182, 199, 243 gelada, Theropithecus 140 **GELECHIIDAE 252** gelida, Macrhybopsis 72 gemina gafuri, Lethe 253 gemina, Ischnura 106 geminatus, Hylogomphus 171 Geminoropa 123 gemma, Hemistoma 173 gemma, Marginella 213 Gemsbok 131, 229 genei, Chondrostama 167 genei, Drymophila 155 genei, Speleomantes 167 genesii, Vertigo 133 Genet, Abyssinian 195 Genet, Crested 18 Genet, Ibiza 224 Genet, Johnston's 195 genetta isabelae, Genetta 224 Genetta 18, 195, 224 geniculata, Boeckella 91 geniculata, Lithasia 118 Genophantis 186 genovensium, Platalina 11 genowaysi, Rhogeessa 139 Geocapromys 28, 178, 179 Geachelone 65, 234, 235 Geoclemys 165 Geocolaptes 154 Geacrinia 67 Geoemyda 64, 200 geoffrensis, Inia 19 geoffroii, Dasyurus 3 geoffrayi azuerensis, Ateles 221 geoffroyi frontatus, Ateles 221 geoffroyi grisescens, Ateles 221 geoffroyi ornatus, Ateles 221 geoffroyi pan, Ateles 221 geoffrayi panamensis, Ateles 221 geoffroyi yucatanensis, Ateles 221 geaffroyi, Ateles 241 geoffroyi, Callithrix 14 Geogale 241 Geomalacus 244 Geomalia 159 Geomalia 159 geometricus, Psammobates 65 GEOMETRIDAE 186, 252

GEOMITRIDAE 124, 133, 174, 215, 245, 256 GEOMYIDAE 22, 142, 231, 242 Geomys 22, 231 Geonemertes 217 Geaphaps 151 Geopsittacus 41 georgei, Gambusia 184 geargiae, Cambarus 93 georgiana, Beloneuria 254 georgiana, Occirhenea 127 georgianum, Pleurobema 111 Georissa 112, 209 Geothlypis 55, 56, 163 GEOTRUPIDAE 249 Geotrygon 39, 151 Gerbillus 242 Gerbillus 24, 143, 242 Gerenuk 131 gerhardti, Elimia 212 gerhildae, Afrithelphusa 95 germaini, Polyplectron 35 Geronticus 31 Gerrhanotus 59 Gerrhosaurus 165 Gerygone, Biak 50 Gerygone, Lord Howe 181 Gerygone, Norfolk Island 50 Gerygane 50, 159, 181 geyeri, Bythiospeum 115 geyerii, Vertigo 133 Gharial 58 Gharial, False 199 gharlapsi, Trochoidea 126 ghetaldi, Paraphoxinus 73 ghigii, Ladigesocypris 72 Ghizáni 72 Giant-petrel, Northern 146 Gibachi 247 gibba, Beddomeia 114 gibba, Leiastyla 127 gibba, Partula 127 gibbensis, Rhagada 122 Gibberula 213 gibberulus Digerus, Tornigenus 239 gibberum, Pleurobema 111 Gibbibarbus 72 Gibbon, Black 16 Gibbon, Buff-cheeked 194 Gibbon, Hoolock 194 Gibbon, Mentawai 16 Gibbon, Pileated 16 Gibbon, Silvery 16 gibboni, Diplommatina 210 gibbonsi, Graptemys 166 gibbosa, Pyganodon 172 gibbosus, Breviceps 67 gibbus, Procambarus 95 Gibbus 191 giffardi, Ectemnius 251 giffordi, Nesotocus 248 Gigante, Cachorrito 79 gigantea, Edwardsina 99 gigantea, Geochelone 65 gigantea, Grallaria 46 gigantea, Pseudibis 31 giganteus tasmaniensis, Macropus 220

Geamitra 124

giganteus, Cordylus 59 giganteus, Spalax 27 gigantula, Palaemnema 108 gigas, Arapaima 202 gigas, Branchinecta 244 gigas, Grammomys 24 gigas, Hydrochrous 153 gigas, Hydrodamalis 178 gigas, Macroderma 10 gigas, Pangasianodon 76 gigas, Phelsuma 182 gigas, Podilymbus 179 gigas, Stereolepis 82 gigas, Tachypleus 209 gigas, Thamnophis 61 gigas, Tridacna 112 Gila 72, 167, 183, 246 gilae, Oncorhynchus 77 gilae, Pyrgulopsis 211 gilae, Tryonia 212 gilberti, Kupeornis 51 gilberti, Noturus 75 gilberti, Pingalla 244 gilberti, Prognathochromis 184 gilbertii, Potorous 4 gilli, Austroglanis 76 gilli, Xenopus 67 gilliardi, Pteropus 9 gilliesi, Amanipodagrion 107 gilliesi, Paryphanta 216 gillissi, Percilia 206 gilpini, Fallicambarus 94 giluwensis, Rattus 144 gilviventris, Xenicus 157 gingica, Arborophila 34 ginkgodens, Mesoplodon 196 Giraffa 130 Giraffe 130 GIRAFFIDAE 130 giramica, Actinella 174 Girardinichthys 80 giraudi, Anceya 119 giraudi, Bridouxiana 119 Gittenbergeri 245 giulianii, Dubiraphia 249 giulianii, Pseudocotalpa 99 glabratum, Heteropoma 210 glabricollis, Cephalopterus 46 glabrirostris, Melanoptila 158 glacialis, Eubalaena 225 glacialis, Eubalaena 18 Glacicavicola 99 GLACIDORBIDAE 113, 209 Glacidorbis 113, 209 gladiator, Malaconotus 48 gladius, Xiphias 236 gladius, Xiphias 207 gladius, Psephurus 70 glandulosa, Pyrgulopsis 211 Glareola 150 GLAREOLIDAE 37, 150 Glaresis 250 glassi, Crocidura 6 Glaucidium 42, 152 glaucogularis, Ara 40 Glaucomys 230, 245 Glaucopsyche 186, 252

glaucus, Anodorhynchus 180 glaucus, Pseudomys 26 glauerti, Bothriembryon 121 gleni, Chalinolobus 137 Glider, Battling 253 Glider, Mahogany 5 Glider, Northern 5 Glider, Squirrel 135 Glider, Yellow-bellied 135, 220 gliroides, Dromiciops 3 Glironia 3 Glirulus 28 glis, Myoxus 145 Glischropus 138 Globicephala 129, 242 globiceps, Galaxias 204 Globonautes 95 globosa, Hirthia 119 globosus, Coelus 99 globulosa, Crax 34 gloriosissima, Diglossa 162 glossema, Carelia 189 Glossgobius 87 Glossogobius 87, 169, 206, 247 Glossolepis 78, 204, 243 Glossophaga 137 GLOSSOSOMATIDAE 254 Glossy-starling, Copper-tailed 164 gloveralleni, Procyon 178 gloveri, Chlamydogobius 87 gloveri, Craterocephalus 78 gloveri, Lagocephalus 207 glutinosa, Myxas 209 glyceia, Hemicycla 256 Glyphis 69 glyphistoma, Ocadia 200 Glyphopsyche 255 Glyphyalinia 217 Glyptophysa 113 Glyptorhagada 122, 173, 239 **GNAPHOSIDAE 207** Gnatcatcher, Creamy-bellied 160 Gnatcatcher, Cuban 160 Gnateater, Hooded 155 gnou, Connochaetes 130 Goat, Chiltan 228 Goat, Cretan 228 Goat, Wild 21 GOBIIDAE 87, 132, 169, 206, 247 Gobio 72, 202 Gobiomorphus 87 Gobius 206 Goby, Arno 87 Goby, Bighead 247 Goby, Bigmouth 169 Goby, Blackthroat 169 Goby, Bluntsnout 247 Goby, Canestrini's 206 Goby, Checked 169 Goby, Dalhousie 87 Goby, Dwarf Pygmy 87 Goby, Edgbaston 87 Goby, Elizabeth Springs 87 Goby, Fly River 247 Goby, Hoese's 206 Goby, Irian 247 Goby, Kei 169

Goby, Kessler's 206 Goby, Kutubu 247 Goby, Lipstick 207 Goby, Mountain 247 Goby, Mulgrave 247 Goby, Naked 169 Goby, Ramu 247 Goby, Red-spotted 247 Goby, Red-tailed 207 Goby, Redneck 207 Goby, Robert's 247 Goby, Sarasin's 87 Goby, Sentani 247 Goby, Sibayi 169 Goby, Sleepy 169 Goby, Tidewater 87 Goby, Tiger 206 Goby, Tropical Sand 169 godeffroyi, Monarcha 159 godeffroyi, Todirhamphus 44 godefrida, Claravis 38 godetiana, Helix 174 godini, Eriocnemis 43 godmani, Antechinus 135 godmani, Choeroniscus 137 Godwit, Hudsonian 150 goedeni, Lepidostoma 254 goeldi, Radioconus 123 goeldii, Callimico 14 goeringi, Hemispingus 55 goerneri, Knipowitschia 206 goesswaldi, Doronomyrmex 100 Goethalsia 153 goffini, Cacatua 152 goisagi, Gorsachius 31 golandi, Ploceus 57 golasi, Hygromia 126 goldmani, Geotrygon 151 goldmani, Heteromys 142 Goldstreifiger 98 golgus, Polyommatus 103 goliath, Conraua 67 goliath, Ducula 39 GOMPHIDAE 107, 171, 238, 244 Gomphurus 107, 171 Gomphus 107, 171 Gonaxis 216 gongshanensis, Muntiacus 197 Gongylomorphus 246 Gonidomus 128, 191 goniobasis, Hirasea 214 Goniosaurus 59 Gonocephalus 199 Gonolek, Papyrus 157 Gonospira 128, 175, 191, 245 gonyostomus, Gonyostomus 128 Gonyostomus 128 gonzalesi, Chrotomys 23 Goodea 80 Goodeid 184 Goodeid, Opal 80 Goodeid, Rainbow 80 Goodeid, Striped 80 GOODEIDAE 80, 184, 247 Goodeido, Solo 80 goodfellowi, Dendrolagus 4 goodfellowi, Rhinomyias 52

Goose, Orinoco 147 Goose, Red-breasted 32 Goose, Ruddy-headed 147 Goose, Swan 32 Gopher, Carrizo Springs Pocket 231 Gopher, Cathlamet Pocket 231 Gopher, Cumberland Island Picket231 Gopher, Goff's Southeastern Pocket231 Gopher, Maritime Pocket 231 Gopher, Michoacan Pocket 23 Gopher, Olympia Pocket 231 Gopher, Puget Sound Pocket 231 Gopher, Rocky Prairie Pocket 231 Gopher, Roy Prairie Pocket 231 Gopher, Sherman's Pocket 231 Gopher, Southern Pocket 242 Gopher, Tacoma Pocket 231 Gopher, Vancouver Pocket 231 Gopher, Yelm Prairie Pocket 231 gopheri, Copris 250 Gopherus 65, 243 goral bedfordi, Naemorhedus 229 goral goral, Naemorhedus 229 Goral, Amur 229 Goral, Brown Himalayan 229 Goral, Evans' Long-tailed 229 Goral, Himalayan 141 Goral, Long-tailed 21, 229 goral, Naemorhedus 141 Goral, Red 21, 229 Goral, South China 229 Goral, Tibetan Red 229 Goral, Western Himalayan 229 gordiagini, Myrmecoxenus 101 gordoni, Fallicambarus 94 gordoni, Xiphophorus 80 gorganensis, Batrachuperus 68 gorgasi, Oryzomys 25 GORGONACEA 128 gorgonae, Proechimys 146 gorgone, Erebia 253 goridaghini, Epimyrma 100 Gorilla 16 gorilla, Gorilla 223 gorilla heringei, Gorilla 223 gorilla gorilla, Gorilla 223 gorilla graueri, Gorilla 223 gorilla, Gorilla 16 Gorilla, Grauer's 223 Gorilla, Mountain 223 Gorilla, Nigerian 223 Gorilla, Western Lowland 223 Gorilla 16, 223 gormonti, Renea 113 Gorsachius 31 gorzugi, Pseudemys 166 Goshawk, Chestnut-shouldered 198 Goshawk, Doria's 148 Goshawk, Grey-bellied 148 Goshawk, Henst's 147 Goshawk, New Britain 148 Goshawk, Red 33 gossypinus allapaticola, Peromyscus 233 gossypinus restrictus, Peromyscus 233 gothei, Brachygalaxias 204 gotscheensis, Calconiscellus 97

Goose, Lesser White-fronted 32

goudoti, Myotis 138 goudotii, Eupleres 18 goughensis, Rowettia 55 gouldi globulosa, Gulella 239 gouldi, Astacopsis 95 gouldiae, Chloebia 57 gouldii, Mesembriomys 144 gouldii, Pseudomys 178 goundae, Mus 25 Goura 39 gowerensis, Monterissa 112 gowersi, Prognathochromis 184 goyderi, Amytornis 242 graceus, Barbus 202 gracilicorpus, Oligosoma 200 Gracilinanus 3, 135, 193 gracilior, Fibulacamptus 96 gracilipes, Crocidura 6 gracilipes, Idiodiaptomus 207 gracilirostris, Apomys 23 gracilirostris, Chloropeta 50 gracilirostris, Vireo 56 gracilis, Austromenidia 204 gracilis, Coelus 99 gracilis, Cryptotis 7 gracilis, Fluviopupa 173 gracilis, Galaxias 76 gracilis, Goodea 80 gracilis, Heterophasia 159 gracilis, Melanotaenia 168 gracilis, Microgale 5 gracilis, Oceanites 197 gracilis, Omphalotropis 210 gracilis, Petaurus 5 gracilis, Rhogeessa 139 gracilis, Streptocephalus 91 gracilis, Syrnolopsis 119 gracilis, Troglohyphantes 88 GRACILLARIIDAE 252 Grackle, Mountain 163 Grackle, Nicaraguan 163 Grackle, Red-bellied 56 Grackle, Slender-billed 182 **GRADUNGULIDAE 207** gradyi, Stygobromus 89 graeca graeca, Testudo 246 groeca nikolskii, Testudo 235 graeca, Testudo 65 graecus, Scardinius 74 graecus, Spalax 27 Graellsia 208 graellsianus, Allognathus 174 grahamensis, Sonorella 174 grahami, Etheostoma 83 Grallaria 46, 155 Grallaricula 46, 155 gramineus, Tanygnathus 41 grammiceps, Stachyris 52 Grammomys 24, 143 gramnicola, Trichia 215 grampianensis, Angrobia 114 Grampus 195 grande, Oligosoma 60 grandidieri, Cleopatra 173 grandidieri, Galidictis 17 grandimanus, Crangonyx 89 grandimanus, Pseudoniphargus 90

grandis, Bradypterus 198 grandis, Crocidura 6 grandis, Epomophorus 8 grandis, Heosemys 166 grandis, Lavigera 119 grandis, Liocypris 185 grandis, Megalobulimus 126 grandis, Neorapana 213 grandis, Peramyscus 144 grandis, Rhabdornis 161 grandis, Thapsia 215 grandisonae, Atelognathus 66 grandituberculatum, Granulomelon 173 granti, Batomys 242 granti, Eremitalpa 5 granti, Galagoides 194 granti, Gazella 130 granti, Ptyochromis 86 Grantiella 54 granulatus, Amychus 249 granulatus, Engaeus 95 granulifrons, Ptilinopus 39 granulimanus, Astacoides 208 Granulina 213 Granulomelon 173 Graphium, Meek's 105 Graphium 105, 171, 208, 253 Graphiurus 28 Grapholitha 254 Graptemys 64, 165, 166 Graptodytes 98 graslini, Gomphus 107 Grass-finch, Grey-cheeked 162 Grass-tyrant, Sharp-tailed 156 Grass-warbler, Bristled 50 Grassbird, Broad-tailed 160 Grassbird, Buff-banded 158 Grassbird, Fly River 51 Grassbird, Marsh 51 grassei, Crocidura 241 grassei, Plagialepis 101 Grasshopper, Central Valley 187 Grasshopper, Desert Monkey 108 Grasshopper, Idaho Point-headed 108 Grasshopper, Lompoc 108 Grasshopper, Michigan Bog 108 Grasshopper, Pinaleno Monkey 108 Grasshopper, Santa Monica Mountains Grasshopper, Sierra Pygmy 109 Grasshopper, Siskiyou Chlocaltis 108 Grasshopper, Spanistic Desert 133 Grasshopper, Torreya Pygmy 109 Grasshopper, Zyantc Band-winged 108 Grasswren, Black 158 Grasswren, Carpentarian 49 Grasswren, Eyrean 242 Grasswren, Grey 158 Grasswren, Thick-billed 49 Grasswren, White-throated 158 gratulabunda, Iglica 211 graueri, Bradypterus 50 graueri, Coracina 157 graueri, Lanistes 210 graueri, Paracrocidura 7 graueri, Pseudocalyptomena 45 gravenhorsti, Liolaemus 199

gravipes, Dipodomys 23 gravis, Eurapteryx 179 gravis, Quemisia 179 grayi, Crocidura 6 grayi, Malurus 159 grayi, Mesoplodon 196 grayi, Zosterops 161 Grayling, Australian 76 Grayling, New Zealand 183 graysoni, Mimodes 49 graysoni, Sylvilagus 29 graysoni, Turdus 161 graysoni, Zenaida 180 Graziana 116, 244 Grebe, Alaotra 29 Grebe, Atitlan 179 Grebe, Colombian 179 Grebe, Hooded 146 Grebe, Junin 29 Grebe, Madagascar 29 Green, Mottled 253 Green-blossom 255 Green-pigeon, Cinnamon-headed 151 Green-pigeon, Flores 151 Green-pigeon, Large 151 Green-pigeon, Pemba 151 Green-pigeon, Sumatran 151 Green-pigeon, Sumba 151 Green-pigeon, Timor 39 Green-pigeon, Whistling 151 Green-pigeon, White-bellied 151 Green-pigeon, Yellow-vented 151 Greenbul, Appert's 48 Greenbul, Baumann's 157 Greenbul, Cameroon 157 Greenbul, Dusky 48 Greenbul, Grey-crowned 48 Greenbul, Grey-headed 157 Greenbul, Liberian 48 Greenbul, Prigogine's 48 Greenbul, Sassi's 157 Greenbul, Yellow-throated Olive 48 greenei, Cottus 82 greenfieldorum, Sanopus 78 Greenfinch, Vietnam 163 greenii, Ptychobranchus 112 Greenshank, Nordmann's 38 greenwayi, Gulella 216 greenwayi, Hannia 206 greenwoodi, Crocidura 6 gregarius, Vanellus 37 Gregorio, Guayacon de San 80 grevyi, Equus 19 Grey-hornbill, Malabar 154 greyi, Macropus 177 Greytail, Equatorial 155 Griffon, Cape 33 grimwoodi, Macronyx 157 **GRIPOPTERYGIDAE 109** grisea, Murina 12 grisea, Myrmotherula 46 griseicauda, Stenocephalemys 145 griseiceps, Basileuterus 55 griseiceps, Myrmeciza 46 griseiceps, Piprites 156 griseipectus, Lathrotriccus 47 griseiventris, Taphrolesbia 44 griseldis, Acrocephalus 158

griseocapilla, Phyllomyias 156 griseostriatus, Francolinus 34 griseoventer ssp., Sminthopsis 219 griseovirescens, Zosterops 54 grisescens, Myotis 12 griseus alaotrensis, Hapalemur 220 griseus caspius, Varanus 246 griseus griseus, Hapalemur 241 griseus occidentalis, Hapalemur 220 griseus, Dusicyon 241 griseus, Grampus 195 griseus, Hexanchus 69 griseus, Ocyceros 154 grobbeni, Gerbillus 24 Gronocarus 250 gronovii, Scelotes 165 Grosbeak, Bonin 182 Grosbeak, Kona 181 Grosbeak, São Tomé 56 grosesmithi, Papilio 171 grossa, Gulella 216 grossum, Cristilabrum 121 grosvenori, Megalurulus 198 Ground-cuckoo, Banded 42 Ground-cuckoo, Coral-billed 152 Ground-cuckoo, Scaled 152 Ground-cuckoo, Sunda 42 Ground-dove, Blue-eyed 38 Ground-dove, Caroline Islands 39 Ground-dove, Marquesan 39 Ground-dove, Palau 151 Ground-dove, Polynesian 39 Ground-dove, Purple-winged 38 Ground-dove, Santa Cruz 39 Ground-dove, Shy 151 Ground-dove, Thick-billed 39 Ground-dove, Wetar 39 Ground-dove, White-throated 151 Ground-jay, Xinjiang 58 Ground-pigeon, Thick-billed 151 Ground-roller, Long-tailed 44 Ground-roller, Pitta-like 154 Ground-roller, Rufous-headed 44 Ground-roller, Scaly 44 Ground-roller, Short-legged 44 Ground-thrush, Crossley's 161 Ground-thrush, Forest 161 Ground-Thrush, Kibale 242 Ground-thrush, Kivu 161 Ground-thrush, Spotted 53 Groundcreeper, Canebrake 155 Grouper, 10-spine 206 Grouper, Bacalao 83 Grouper, Brown 168 Grouper, Comb 206 Grouper, Giant 82 Grouper, Gulf 83 Grouper, Leopard 83 Grouper, Marbled 82 Grouper, Nassau 83 Grouper, Sawtail 83 Grouper, Snowy 82 Grouper, Venezuelan 83 Grouper, Warsaw 82 Grouse, Caucasian 149 Grouse, Chinese 149 Grouse, Siberian 149 GRUIDAE 36, 131, 149

GRUIFORMES 35, 131, 149, 180, 198, grunniens, Bos 20 Grunt, Brownstriped 84 Grunter, Adamson's 83 Grunter, Angalarri 247 Grunter, Drysdale 169 Grunter, Fortesque 168 Grunter, Gilberts 244 Grunter, Greenway's 206 Grunter, Kimberley 169 Grunter, Large-scale 169 Grunter, Leathery 206 Grunter, Long-nose Sooty 168 Grunter, Midgley's 169 Grunter, Small-Headed 206 Grunter, Striped 206 Grunter, Threespot 206 Grunter, Yamur Lake 83 Grus 36, 131, 149 GRYLLIDAE 108, 133, 187 Grylloblatta 99 **GRYLLOBLATTARIA 99** Grylloblattid, Mount St. Helens' 99 GRYLLOBLATTIDAE 99 Gryllotalpa 209 GRYLLOTALPIDAE 209 gryneus sweadneri, Mitoura 252 grypus, Halichoerus 224 grypus, Aaptosyax 202 Grysbok, Cape 131 Grysbok, Sharpe's 131 guacamaia, Scarus 87 guadaloupensis, Eptesicus 12 guadeloupensis, Amphicyclotulus 188 guadeloupensis, Oleacina 190 guamensis, Omphalotropis 210 guamensis, Partula 127 guamensis, Succinea 217 Guan, Baud¾ 34 Guan, Bearded 34 Guan, Black 149 Guan, Cauca 34 Guan, Chestnut-bellied 34 Guan, Horned 34 Guan, Wattled 149 Guan, White-browed 149 Guan, White-crested 149 Guan, White-winged 34 guanicoe cacsilensis, Lama 226 guanicoe huanacus. Lama 226 guanicoe voglii, Lama 226 guardia, Peromyscus 144 guarouba, Aratinga 40 Gubernatrix 55 gud, Chionomys 143 Gudgeon, Barnett River 169 Gudgeon, Barred 206 Gudgeon, Blind 206 Gudgeon, Danube 202 Gudgeon, Drysdale 169 Gudgeon, False-Spotted 247 Gudgeon, Flinders Ranges 247 Gudgeon, Golden 244 Gudgeon, Highlands 247 Gudgeon, Island 206 Gudgeon, Karamui 247 Gudgeon, Kessler's 202

Gudgeon, Malas 247 Gudgeon, Mitchell 169 Gudgeon, Paniai 206 Gudgeon, Prince Regent 169 Gudgeon, Purple Spotted 247 Gudgeon, Slender 169 Gudgeon, Wau 247 Gudgeon, White-finned 202 gueldenstaedti, Acipenser 235 Guenon, Red-eared 15 Guenon, Sclater's 15 guentheri, Christinus 59 guentheri, Microtus 144 guentheri, Phelsuma 59 guentheri, Scelotes 61 guereza gallarum, Colobus 222 guerinianus, Discus 190 guerinii, Truncatella 212 guianensis, Morphnus 148 guiarti complex, Harpagochromis 236 guidoni, Solatopupa 245 guigna, Oncifelis 16 guildingii, Amazona 40 guilielmi, Paradisaea 164 guinasana, Tilapia 86 Guineafowl, White-breasted 34 guineensis, Cornigomphus 107 guineensis, Eptesicus 138 guineensis, Rhinolophus 137 guiraonis, Barbus 71 gularis, Heliodoxa 153 gularis, Francolinus 35 guldenstaedti, Acipenser 70 Gulella 128, 191, 216, 239, 240, 245 Gulickia 120 Gull, Audouin's 131 Gull, Heermann's 150 Gull, Lava 38 Gull, Olrog's 38 Gull, Pacific 150 Gull, Relict 150 Gull, Saunders's 38 Gull, White-eyed 38 gulo, Gulo 17 Gulo 17 Gundi, Felon 27 gundlachi, Accipiter 33 gundlachi, Mysateles 28 gunnii gunnii, Perameles 219 gunnii ssp., Perameles 219 gunnii, Perameles 4 gunningi, Amblysomus 5 gunningi, Sheppardia 52 guntheri, Sphenodon 58 gunung, Mallomys 24 gurneyi, Aquila 148 gurneyi, Mimizuku 42 gurneyi, Pitta 47 gutta, Cysticus 213 guttata, Clemmys 64 guttata, Zoothera 53 guttatum, Toxostoma 158 guttatus, Psilorhamphus 155 guttifer, Tringa 38 gutturalis, Habia 162 gutturalis, Oreoscopus 159 gutturalis, Saxicola 160

gutturasa, Procapra 141 gutturosa, Tilapia 86 guzmani, Streptocephalus 91 gwatkinsii, Martes 17 gwendolinae mkusiensis, Gulella 239 gyldenstolpei, Isopachys 200 Gyliotrachela 175 Gymnobelideus 5 gymnocephala, Pityriasis 157 gymnocephalus, Picathartes 51 Gymnacephalus 83, 206 Gymnocharacinus 75 Gymnochthebius 249 Gymnocrex 36 Gymnogyps 32 Gymnomyza 54 Gymnophaps 151 Gymnophalus 98 gymnops, Rhegmatorhina 155 Gymnostinops 56 gymnotis, Strigocuscus 193 gymnotrachelus, Neogobius 206 gymnura, Saccopteryx 136 Gymnure, Dwarf 6 Gymnure, Hainan 6 Gymnure, Mindanao 6 Gymnuromys 24 gyorensis, Coluber 61 Gyps 33, 148 Gyraulus 113 **GYRINIDAE 249** Gyrotoma 117, 118 haasi, Barbus 71 haasi, Nesithmysus 248 haastii, Apteryx 29 habbema, Antechinus 193 habbema, Hydromys 143 habei, Ogasawarana 112 Habia 55, 162 Habromys 24, 143 Habroptila 36 habroptilus, Strigops 181 hachijoensis, Luchuena 215 Hacrochlamys 124 haddletoni, Lampsilis 172 Haddock 77 haddocki, Rhyacophila 255 hadenoecus, Stygabramus 89 hadithaensis, Rhinopoma 10 Hadra 122 Hadramphus 185, 248 hadrourus, Uromys 145 Hadzia 237 hadzii, Niphargus 90 HADZIIDAE 90, 237 haemastica, Limosa 150 HAEMATOPINIDAE 98 Haematopinus 98 HAEMATOPODIDAE 37, 150 Haematopus 37, 150, 180 haematostictum, Dicaeum 53 haematuropygia, Cacatua 40 HAEMULIDAE 84 Haeromys 24 haesitatus, Cisticola 50 hageni, Rhinocypha 106 hagleri, Pleurobema 111

hahajimana, Lampracystis 124 hahajimana, Mandarina 214 hahajimana, Vitrinula 189 hahneli, Parides 208 Haideoporus 248 hainaldi, Rattus 144 hainanensis, Hylomys 6 hainanus, Lepus 28 hainanus, Phylloscopus 51 Hairstreak, Avalon 103 Hairstreak, Bartram's 252 Hairstreak, Sweadner's 252 halakalae, Nesothauma 254 haleakalae, Ectemnius 251 haleakalae, Neseis 251 halei, Discherodontus 243 halei, Sicyopterus 207 Halfbeak, Poso 205 Haliaeetus 33, 148 Halibut, Atlantic 88 Halichoerus 224 HALIPLIDAE 249 Haliplus 249 hallae, Beddomeia 114 halli, Lestodelphys 3 halli, Macronectes 146 halli, Telmatobius 201 hallucatus, Dasyurus 135 HALOCYPRIDA 96 HALOCYPRIDIDAE 96 Halolimnohelix 215 halope, Mictocaris 97 halophyllus, Hipposideros 136 hamadryas, Papio 140 hamatus, Taeromys 27 hamiltoni, Leiopelma 66 hamiltoni, Moxostoma 168 hamiltoni, Taphozous 10 hamiltonii, Geoclemys 165 Hamlet, Masked 83 hamlini, Clytorhynchus 158 hamlyni kahuziensis, Cercopithecus 222 hamlyni, Cercapithecus 140 hammondi, Thamnophis 200 Hampala 72 Hamster, Grey 143 Hamster, Romanian 25 Hamster-rat, Greater 143 Hamster-rat, Lesser 23 Handfish, Spotted 78 handleyi, Lonchophylla 11 handleyi, Marmosops 3 handlirschi, Phoxinellus 73 Hanging-parrot, Green-fronted 152 Hanging-parrot, Sangihe 41 Hanging-parrot, Wallace's 41 Hanging-parrot, Yellow-throated 152 Hangul 226 hanleyianum, Pleurobema 111 hannae, Cataglyphis 100 Hannia 206 hansoni, Psilotreta 255 Hansonoperla 254 hantu, Chimarrogale 6 Hapalemur 14, 220, 241 Hapalomys 143 Hapalopsittaca 41

Haplochromis 85, 184 haplochrous, Turdus 161 Haplonycteris 9 Haplophaedia 153 Haplophthalmus 97 HAPLOTAXIDA 109, 172 harai, Stygobromus 89 Harapgoxenus 100 Hardella 166 hardwickii, Gallinago 150 hardwickii, Solegnathus 82 Hardyhead, Dalhousie 78 Hardyhead, Darling River 78 Hardyhead, Drysdale 168 Hardyhead, Finke River 168 Hardyhead, Glovers 78 Hardyhead, Kailola's 243 Hardyhead, Kutubu 78 Hardyhead, Magela 204 Hardyhead, Murray 78 Hardyhead, Pima 204 Hardyhead, Prince Regent 168 Hare, Alaskan 242 Hare, Broom 28 Hare, Ethiopian 197 Hare, Hainan 28 Hare, Hispid 28 Hare, Yarkland 146 Hare-wallaby, Banded 4, 220 Hare-wallaby, Central 177 Hare-wallaby, Eastern 177 Hare-wallaby, Rufous 4, 220 Hare-wallaby, Spectacled 135, 219, 220 harenna, Crocidura 6 harmani, Crossoptilon 34 Harmogenanina 125, 190, 215 haroldyoungi, Lygosoma 200 haroyi, Aegialia 249 Harpactes 44 HARPACTICOIDA 96, 132, 208 Harpagochromis 85, 184, 236 Harpagoxenus 100 harpi, Fallicambarus 94 Harpia 148 Harpiocephalus 138 Harpyhaliaetus 33, 148 harpyja, Harpia 148 Harpyopsis 33 Harrier, Black 148 Harrier, Madagascar 148 Harrier, Pallid 148 harrisi, Phalacrocorax 31 harrisii, Aegolius 152 harrisoni, Musonycteris 11 Hartebeest, Bubal 227 Hartebeest, Coke's 227 Hartebeest, Common 130 Hartebeest, Lelwel 227 Hartebeest, Lichtenstein's 130 Hartebeest, Red 227 Hartebeest, Swayne's 227 Hartebeest, Tora 227 Hartebeest, Western 227 harteri paucimaculata, Neradia 246 harterti, Batrachostomus 198 harterti, Ficedula 158 harterti, Phlogophilus 153 harterti, Upucerthia 155

hartfieldi, Orconectes 94 harti, Cambarus 93 harti, Rhagada 122 hartlaubi, Otus 153 hartlaubi, Pseudodacnis 55 hartmanniana, Elimia 188 hartungi, Caseolus 256 hartwigi, Praomys 26 hartwigi, Trithemis 107 hartwigschuetti, Alzoniella 114 Harvestman, Melones Cave 88 harveyensis, Sinployea 189 harveyi, Cephalophus 130 harveyi, Parosphromenus 88 harwoodi, Francolinus 35 harzi, Isophya 109 hasitata, Pterodroma 30 hatchi, Eanus 249 hatinensis, Lophura 35 Hauffenia 116, 211 haughtoni, Colophon 99 hausdorfi, Acicula 210 hawaiensis, Pupoidopsis 216 hawaiiensis, Chersodromia 250 hawaiiensis, Corvus 58 hawaiiensis, Deinomimesa 251 hawaiiensis, Ithamar 251 hawaiiensis, Kalania 251 hawaiiensis, Lyropupa 216 hawaiiensis, Neritilia 209 hawequensis, Afroedura 165 Hawk, Galápagos 33 Hawk, Grey-backed 33 Hawk, Gundlach's 33 Hawk, Hawaiian 148 Hawk, Hispaniolan 33 Hawk, Mantled 148 Hawk, Plumbeous 148 Hawk, Rufous-tailed 148 Hawk, Semicollared 147 Hawk, Semiplumbeous 148 Hawk, White-necked 33 Hawk-eagle, Black-and-white 148 Hawk-eagle, Javan 33 Hawk-eagle, Philippine 33 Hawk-eagle, Sulawesi 148 Hawk-eagle, Wallace's 33 Hawk-owl, Papuan 198 Hawkmoth, Willowherb 208 hayi, Stygobromus 89 haysiana, Dysnomia 187 haysiana, Elimia 117 haysiana, Epioblasma 110 heaneyi, Crateromys 23 heavisidii, Cephalorhynchus 195 hebardi, Erythroecia 253 hebardi, Vertigo 175 hebe, Partula 191 heckeli, Alburnus 202 hecki, Macaca 140 hectori, Cephalorhynchus 18 hectori, Mesoplodon 196 Hedgehog, Hugh's 6 Hedgehog, South African 241 Hedleya 119 Hedleyoconcha 123 Hedylepta 186

Heelsplitter, Alabama 112 Heelsplitter, Carolina 111 Heelsplitter, Tennessee 172 Heelsplitter, Texas 112 heermanni berkeleyensis, Dipodomys heermanni morroensis, Dipodomys 231 heermanni, Larus 150 Heimyscus 242 heinertzi, Lacconectus 248 heinrichi, Bunomys 143 heinrichi, Cacomantis 198 heinrichi, Cossypha 50 heinrichi, Geomalia 159 heinrichi, Hyosciurus 22 heinrothi, Puffinus 30 helanshanensis, Ochotona 28 Helarctos 195 Heleia 161 Heleioporus 167 helena, Chilonopsis 191 helena, Perdicella 121 helenae, Craterocephalus 168 helenae, Hypothymis 159 helenae, Leucocythere 98 helenae, Mellisuga 153 helenaensis, Physiculus 77 Helenoconcha 189 Helenodiscus 189 Heleophryne 66 HELEOPHRYNIDAE 66 heliaca, Aquila 33 Heliangelus 43 Helicarion 125, 245, 256 HELICARIONIDAE 125, 190, 215, 245, 256 Helicella 126, 174 HELICELLIDAE 245 HELICIDAE 125, 133, 174, 190, 215, 239, 245, 256 heliciformis, Tropidoptera 121 Helicina 112 HELICINIDAE 112, 209, 238 HELICODISCIDAE 125, 174 Helicodiscus 174 helicogyra, Cincinnatia 115 Heliconius 104, 253 Helicopsis 174 Helicostyla 121 Helicoverpa 186 heliobates, Camarhynchus 54 Heliodiaptomus 92 Heliodoxa 153 Heliopais 37 Heliophobius 145 **HELIORNITHIDAE 37** heliosylus, Zonerodius 147 heliotropium, Astraea 112 Helisoma 256 Helix 125, 174 hellenica, Cobitis 203 hellenicus, Eudontomyzon 69 hellenicus, Pungitius 81 hellenicus, Tropidophoxinellus 203 helleri, Turdus 53 hellmayri, Synallaxis 45 hellmichi, Liolaemus 199

Helmet-shrike, Gabela 49 Helmet-shrike, Grey-crested 49 Helmet-shrike, Yellow-crested 49 Helminthoglypta 125, 174, 239 HELMINTHOGLYPTIDAE 125, 174, 215, 239 Heloderma 59 **HELODERMATIDAE 59** helonomus, Allanaspides 90 hembeli, Margaritifera 110 HEMEROBIIDAE 254 Hemiandrus 254 Hemiargus 252 Hemibelideus 135 Hemiboeckella 91 Hemicordulia 106, 238 hemictenus, Puntius 74 Hemicycla 125, 133, 174, 245, 256 Hemidaina 254 Hemidiaptomus 207 Hemignathus 56, 181 Hemigrammocapoeta 243 hemileucurus, Phlogophilus 153 Hemimyzon 74 hemionus cerrosensis, Odocoileus 227 hemionus hemionus, Equus 225 hemionus hemippus, Equus 225 hemionus khur, Equus 225 hemionus kulan, Equus 225 hemionus luteus, Equus 225 hemionus onager, Equus 225 hemionus, Equus 19 Hemiphlebia 107 HEMIPHLEBIIDAE 107 HEMIPTERA 250 HEMIRAMPHIDAE 81, 168, 205, 243 Hemisaga 109 Hemispingus, Rufous-browed 162 Hemispingus, Slaty-backed 55 Hemispingus 55, 162 Hemistena 111 Hemistoma 116, 173 Hemitragus 21 Hemitremia 202 Hemitriccus 47, 156 hemixantha, Microeca 159 hendersoni, Rhyncogonus 248 hendersoni, Somatogyrus 212 Henicopernis 148 Henicophaps 151 Henicorhina 158 henningi, Poecilmitis 103 henrici, Ficedula 50 henseli, Drymaeus 121 henslowii, Ammodramus 162 henstii, Accipiter 147 Heosemys 64, 166 Hephaestus 83, 168, 206 HEPIALIDAE 252 **HEPTAGENIIDAE 250** heptaptychius, Semperdon 245 HEPTAXODONTIDAE 179 heptneri, Salpingotus 143

heran, Nyctophilus 13

herbertaxelrodi, Melanotaenia 205

herbertena, Amplirhagada 214

herbertensis, Pseudochirulus 135

herberti, Stachyris 52 hercegovinae, Alona 90 herculeana, Labidura 99 herculeanus, Polposipus 99 hercules glaseri, Dynastes 250 hercules hercules, Dynastes 250 hercules reidi. Dynastes 250 hercules, Alcedo 44 herero, Namibornis 159 herioti, Cyornis 158 hermanni boettgeri, Testudo 246 hermanni, Myotis 194 hermanni, Pseudoscaphirhynchus 70 hermanni, Testudo 166 hermansi, Beddomeia 256 hermaphroditus lignicolor, Paradoxurus 224 hermes, Lycaena 103 herminae, Opheodrys 165 herminieri, Leiocephalus 182 herminieri, Melanerpes 155 Hermit, Hook-billed 43 Hermit, Koepcke's 153 Hermit, Saw-billed 153 hermonensis, Apodemus 23 Heron, Agami 147 Heron, Great-billed 147 Heron, Madagascar 31 Heron, White-bellied 31 Heron, Zigzag 147 Herpailurus 223 HERPESTIDAE 16, 224 Herpsilochmus 46, 155 herrei, Puntius 74 Herring, Toothed River 202 Herring, Venezuelan 71 hershkovitzi, Aotus 194 hesperia, Lonchophylla 11 Hesperia 102, 252 hespericum, Craspedoma 133 HESPERIIDAE 102, 170, 208, 252 Hesperilla 252 Hesperion, Karok 215 Hesperodiaptomus 92 Hesperoptenus 12 Hetaerina 106 heteracantha, Deinacrida 108 Heteragrion 107 Heteralocha 182 Heteramphus 248 Heterelmis 249 Heterexis 248 heterochir, Gambusia 80 Heterocleon 250 Heterocrossa 252 Heterocyclus 116 heterodon, Alasmidonta 255 heterodon, Leiostyla 127 heterodus, Orthogeomys 22 Heterohyrax 20 Heteromirafra 48 Heteromunia 163 Heteromyias 159 HETEROMYIDAE 23, 131, 142, 231, 242 Heteromys 23, 142 Heteronetta 147 Heteronympha 253

Heterophasia 159 Heteropneustes 76 HETEROPNEUSTIDAE 76 heteropodus, Stygobromus 89 Heteropoma 210 Heteropsomys 178 heteropus, Machiloides 254 Heteroxolmis 47 heterura, Asthenes 45 hettitorum, Gobio 72 heudei, Paradoxornis 160 hewitsonii, Ideopsis 104 hewitti, Heleophryne 66 HEXANCHIDAE 69 **HEXANCHIFORMES 69** Hexanchus 69 hexaploidus, Bulinus 173 Hexaprotodon 20, 226 HEXATHELIDAE 207 hexodon, Helicodiscus 174 Hexolobodon 179 hickmani, Allanaspides 90 hidamontanus, Hynobius 68 Hieremys 64 hieroglyphica, Omphalotropis 114 hieroglyphicum, Isomma 107 higginsii, Lampsilis 111 hildebrandti thikensis, Maizania 238 hildergardeae, Taphozous 10 hilli, Scortum 206 hillieri, Dasycercus 3 hillieri, Divellomelon 122 hillii, Argonemertes 175 Hillstar, Wedge-tailed 153 Himantopus 37 Himantura 70 Himeroconcha 214 himeros, Papilio 171 Hind, Speckled 82 hindei, Beamys 23 hindei, Turdoides 53 hindwoodi, Lichenostomus 132 hineana, Somatochlora 106 hinkleyi, Somatogyrus 212 hinpoon, Niviventer 144 hinsbyi, Pleuroxia 122 hiostius, Typhaeus 249 Hippocamelus 20, 197 hippocampus, Hippocampus 81 Hippocampus 81, 82, 205 hippocrepis, Polygyra 175 hippoglossus, Hippoglossus 88 Hippoglossus 88 HIPPOLYTIDAE 95 hippophaes, Hyles 208 HIPPOPOTAMIDAE 20, 226 Hippopotamus, Pygmy 20 Hippopotamus 226 hippopus, Hippopus 133 Hippopus 133 hipposideros, Betta 88 hipposideros, Rhinolophus 10 Hipposideros 10, 136, 137, 194 Hippotragus 130, 178, 228 Hirasea 124, 190, 214 hiraseana, Boninena 121 hirasei, Camptoceras 210

hirasei, Mandarina 214 hirasei, Ogasawarana 209 Hirasiella 215 Hirinaba 128 hirosei, Mortonagrion 106 hirsuta, Myrmica 101 hirsutissima, Cytora 212 hirsutus bernieri, Lagorchestes 220 hirsutus dorreae, Lagorchestes 220 hirsutus hirsutus, Lagorchestes 220 hirsutus ssp., Lagorchestes 220 hirsutus, Artibeus 11 hirsutus, Brachionichthys 78 hirsutus, Bulimulus 126 hirsutus, Coelops 194 hirsutus, Hydroporus 248 hirsutus, Lagorchestes 4 hirsutus, Reithrodontomys 145 Hirthia 119 hirticeps luteocincta, Perdita 251 HIRUDINEA 171 HIRUDINIDAE 171 Hirudo 171 hirundinacea, Cypsnagra 162 hirundinaceus, Caprimulgus 153 HIRUNDINIDAE 48, 157, 198 Hirundo 48 hiska, Oxymycterus 25 hispanica, Anaecypris 71 hispanica, Suboestophora 175 hispanica, Valencia 80 hispida botnica, Phoca 224 hispida ladogensis, Phoca 224 hispida saimensis, Phoca 224 hispida, Crocidura 6 hispida, Japonia 210 hispidus, Caprolagus 28 Histiotus 12, 138 histrio, Eas 40 histrio, Hyophryne 201 histrionica, Phaps 151 histrix, Hippocampus 81 hiwasseensis, Cambarus 93 hobbit, Syconycteris 10 Hobbseus 94 hobbsi, Crangonyx 89 hochstetteri, Leiopelma 243 hochstetteri, Paryphanta 216 hodgei, Dryocopus 154 hodgesi, Gomphus 171 hodgsoni, Tickellia 160 hodgsonii, Pantholops 21 Hodomys 143 hoedtii, Gallicolumba 39 hoeschi, Anthus 157 hoesei, Glossogobius 206 hoffmanni, Choloepus 193 hoffmannsi, Rhegmatorhina 155 Hog, Pygmy 20 Hog, Western Forest 226 hogei, Phrynops 62 Hogfish 87 Holcobius 248 holmwoodii, Chondrostoma 71 Holoaden 67 holosericea, Drepanoptila 38 holostoma, Gonospira 128

holsingeri, Fontigens 211 holsingeri, Sphalloplana 256 holsti, Parus 161 holsti. Rana 67 holstonia, Lasmigona 172 halti. Orconectes 94 holtzi, Rana 67 homalonotum, Oligosoma 60 Homaloptera 74 hombroni, Actenoides 44 homeana, Kinixys 200 homerus, Papilio 105 HOMINIDAE 16, 223 homochroa, Oceanodroma 146 Homoeoneuria 250 Homopholis 165 HOMOPTERA 170, 186, 251 Homopus 65, 166 Homoroselaps 165 hondurensis, Cryptotis 7 Honey-buzzard, Black 148 Honeyeater, Black-chested 199 Honeyeater, Bonin 54 Honeyeater, Bridled 162 Honeyeater, Buru 162 Honeyeater, Crow 54 Honeyeater, Eungella 132 Honeyeater, Kadavu 162 Honeyeater, Painted 54 Honeyeater, Regent 54 Honeyeater, Streaky-breasted 162 Honeyeater, Tagula 199 Honeyguide, Dwarf 154 Honeyguide, Malaysian 154 Honeyguide, Yellow-footed 44 Honeyguide, Yellow-rumped 154 hongii, Placostylus 121 hongkongensis, Kaliella 125 Hongolua 217 honoluluensis, Apterocychus 249 hoogerwerfi, Lophura 35 hoogerwerfi, Rattus 26 hoogstraali, Gerbillus 24 hoogstraali, Lemniscomys 197 hookeri, Phocarctos 17 hoolock, Hylobates 194 hopetonensis, Elliptio 172 hopkei, Carpodectes 156 hapkinsi, Pelomys 25 Hoplocephalus 62 Hoplodactylus 59, 165, 182, 243 HOPLONEMERTEA 128, 175, 217 Hoplotilapia 184 Hopping-mouse, Dusky 25 Hopping-mouse, Northern 144 hoppingi, Lytta 249 Horaglanis 76 horai, Hippocampus 81 horei, Reymondia 119 horei, Tiphobia 119 Hornbill, Black 154 Hornbill, Brown 154 Hornbill, Brown-cheeked 154 Hornbill, Helmeted 154 Hornbill, Luzon 154

Hornbill, Narcondam 44 Hornbill, Plain-pouched 44 Hornbill, Rufous 154 Hornbill, Rufous-necked 44 Hornbill, Samar 154 Hornbill, Sulu 44 Hornbill, Sumba 44 Hornbill, Visayan 44 Hornbill, Wrinkled 44 Hornbill, Writhed 44 Hornbill, Writhed-billed 44 Hornbill, Yellow-casqued 154 hornbosteli, Lamprocystis 215 hornbyi, Oceanodroma 197 Hornsnail, Corpulent 118 Hornsnail, Ringed 118 Hornsnail, Rough 118 Hornsnail, Rugged 118 Hornsnail, Shortspire 118 Hornsnail, Skirted 118 Hornsnail, Spiral 118 Hornsnail, Telescope 118 Hornsnail, Upland 118 horridulum, Cyclophorus 187 horridum, Heloderma 59 Horse, Przewalski's 225 Horse, Przewalski's Wild 178 horsfieldii, Testudo 65 horsti, Procambarus 95 hortoni, Fallicambarus 94 hosei, Diplogale 18 hosei, Lagenodelphis 195 hosei, Lariscus 22 hosei, Suncus 8 hosii, Oriolus 164 hosonoi, Myotis 138 hosonoi, Sorex 7 hospes, Barbus 167 hospiton, Papilio 105 hospitum, Monomorium 101 hotsoni, Calomyscus 23 housei, Amytornis 158 houstonensis, Bufa 66 houstonensis, Quadrula 172 Houting 204 hova, Acraea 252 howardi, Cambarus 93 howarthi, Caconemobius 108 hawei, Ophiogomphus 107 howeinsulae, Omphalotropis 210 howelli, Sylvisorex 8 howelli, Trox 250 howensis, Nyctophilus 177 howensis, Pteropus 9 howesi, Bathanalia 119 howesi, Prognathochromis 85 Howler, Brown 14 Howler, Guatemalan 241 hoyi, Coregonus 77 hozgargantae, Agabus 98 hrabei, Niphargus 90 huacahuasicus, Liolaemus 60 huallagae, Aulacorhynchus 154 huancavelicae, Asthenes 45 hubbsi, Coahuilix 115 hubbsi, Lampetra 167 hubbsi, Moxostoma 75

Hornbill, Mindanao 154

Hornbill, Mindoro 44

hubbsi, Notropis 202 hubbsi, Novumbra 168 hubbsi, Stygobromus 89 Hubbsina 80 huberi, Strongylognathus 102 hubrichti, Allocrongonyx 89 hubrichti, Phaeognathus 68 hubrichti, Plethodon 68 hubrichti, Stenotrema 215 hubricti, Vertigo 175 Huchen 77 hucho, Hucho 77 Hucho 77 hucucha, Oxymycterus 25 hudsoni, Knipolegus 156 hudsonicus grahamensis, Tamiasciurus 231 hudsonius campestris, Zapus 232 hudsonius luteus, Zapus 242 hudsonius preblei, Zapus 232 hugeli, Aulopyge 71 hughi, Mesechinus 6 Huia 182 Huleechius 249 hulensis, Acanthobrama 183 hullii, Beddomeia 114 humbloti, Ardea 31 Humblotia 50 humboldti, Spheniscus 146 humedasae, Polyommatus 103 humei, Sphenocichla 160 humerosus, Somatogyrus 212 humiae, Syrmaticus 35 humilis, Ichthyophaga 148 humilis, Acerodon 8 humilis, Eupodotis 150 humilis, Hydroporus 248 humilis, Yuhina 161 Hummingbird, Bee 153 Hummingbird, Chestnut-bellied43 Hummingbird, Glow-throated 43 Hummingbird, Mangrove 43 Hummingbird, Oaxaca 43 Hummingbird, Rufous-cheeked 153 Hummingbird, Sapphire-bellied43 Hummingbird, Scissor-tailed 43 Hummingbird, White-tailed 43 hungarica, Paladilhia 173 hungerfordi, Brychius 249 Hungerfordia 210 hungerfordiana rufopila, Chlorilis 239 hunteri, Damaliscus 21 huntsmani, Coregonus 77 hurdi, Cophura 250 hurdi, Metapogon 250 hurtadoi, Gambusia 80 huso, Huso 236 huso, Huso 70 Huso 70, 236 hussoni, Hydromys 143 hutchinsi, Kimberleyeleotris 169 Hutia, Bahamian 28 Hutia, Bushy-tailed 146 Hutia, Cabrera's 28 Hutia, Chapman's Prehensile-tailed28 Hutia, Dwarf 28

Hutia, Garrido's 28

Hutia, Hispaniolan 28 Hutia, Isla de la Juventud Tree 146 Hutia, Jamaican 28 Hutia, Large-eared 28 Hutia, Little Earth 28 huttoni, Lyperobius 248 huttoni, Murina 138 huttoni, Ptilinopus 39 huttoni, Puffinus 30 hyacinthinus, Anodorhynchus 40 Hyaena, Brown 241 Hyaena, Spotted 129 Hyaena 241 HYAENIDAE 129, 224, 241 hyalelloides, Gammarus 90 hyalina, Conozoa 187 hyalina, Diplommatina 256 hyalina, Partula 127 hyalinoides, Tayloria 217 hyalinus, Sinocyclocheilus 74 hyantis andrewsi, Euchloe 253 hyattiana, Carelia 189 Hybognathus 72 Hybomys 24, 143 hydaspe conquista, Speyeria 253 Hydaticus 248 hydei, Elimia 117 Hydraena 249 HYDRAENIDAE 249 hydrobates, Ichthyomys 143 HYDROBATIDAE 30, 146, 197 Hydrobe, Blue Spring 114 Hydrobe, Dense 114 Hydrobe, Fenney Spring 114 Hydrobe, Wekiwa 114 Hydrobia 116 HYDROBIIDAE 114, 173, 188, 211, 238, 244, 256 HYDROCENIDAE 112, 209 Hydrochara 249 hydrocharis, Tanysiptera 198 Hydrochrous 153 hydrocorax, Buceros 154 Hydrodamalis 178 hydrodromus, Sorex 7 Hydromantes 68 Hydromedusa 62 Hydromys 24, 143 HYDROPHIIDAE 62 HYDROPHILIDAE 249 Hydroporus 248 Hydropotes 141, 227 Hydropsyche 187 HYDROPSYCHIDAE 187 Hydroptila 254 **HYDROPTILIDAE 254** Hydrosaurus 199 Hydrotarsus 98 Hyemoschus 141 Hyetornis 42 Hygromia 126 HYGROMIIDAE 126, 133, 174, 190, 215, Hygrotus 185, 248 Hyla 66, 166, 201 hylas freyi, Coenagrion 237 Hyles 208

HYLIDAE 66, 166, 201, 235, 243, 246 Hylobates 16, 140, 194, 195 HYLOBATIDAE 16, 140, 194 Hylochoerus 226 hylocrius, Hemitragus 21 Hylocryptus 45, 155 Hylodes 67 Hylogomphus 171 hylomyoides, Maxomys 144 Hylomys 6, 136 Hylomyscus 242 Hylonympha 43 Hylopetes 22, 142 Hylopezus 155 Hylorchilus 49 Hymenolaimus 32 HYMENOPTERA 99, 170, 208, 251 HYNOBIIDAE 68, 201 Hynobius 68, 201 Hyophryne 201 Hyosciurus 22 Hypena 186 hyperion, Poecilmitis 103 HYPEROLIIDAE 66, 243 Hyperolius 66 Hyperoodon 130 hyperythra, Brachypteryx 50 hyperythrus, Cnemidophorus 200 hyperythrus, Odontophorus 149 hyperythrus, Tarsiger 160 Hyphydrus 248 Hypnophila 214 hypochondriacus, Siptornopsis 155 hypochroma, Sporophila 163 Hypodryas 208 Hypogeomys 24 hypogeus, Acanthocyclops 92 hypoglauca, Andigena 154 hypogrammica, Stachyris 52 hypolais, Zosterops 162 Hypolestes 107 hypoleuca, Cissa 164 hypoleucos, Falco 33 hypoleucus, Capito 44 hypoleucus, Sphecotheres 199 hypoleucus, Synthliboramphus 150 hypolia, Hirasea 214 Hypolimnas 253 Hypolimnas 253 Hypolysia 217 Hypomesus 76 hypomicrus, Nesophontes 177 hypophyllus, Hipposideros 136 Hypoplectrus 83 hypopolia, Lepidochrysops 186 Hypopyrrhus 56 Hypothymis 50, 159 hypowattan, Parantica 104 hypoxantha, Gerygone 50 hypoxanthus, Brachyteles 14 hypoxanthus, Neodrepanis 47 hypoxanthus, Oenomys 197 hypoxanthus, Ploceus 164 Hypseleotris 169, 244 Hypsipetes 48, 181 HYRACOIDEA 19, 226 Hyrax, Eastern Tree 19

hyrcanicus, Apodemus 197 Hyridella 255 HYRIIDAE 110, 255 Hysterocarpus 247 hystricella, Pronesopupa 216 hystricelloides, Thaumatodon 124 HYSTRICIDAE 28, 145 hystricosus, Euastacus 96 Hystrix 28, 145 la 138 iasonia, Idea 171 ibadanensis, Malimbus 57 Iberocypris 72 iberus, Aphanius 205 Iberus 174 Ibex, Gredos 228 lbex, Nubian 21 Ibex, Pyrenean 228 Ibex, Sind 228 Ibex, Spanish 141 Ibex, Walia 21 Ibis, Black-headed 147 lbis, Crested 31 Ibis, Dwarf Olive 31 Ibis, Giant 31 Ibis, Madagascar Crested 147 Ibis, Northern Bald 31 Ibis, Red-naped 147 Ibis, Réunion Flightless 179 Ibis, Southern Bald 31 Ibis, White-shouldered 31 Icaricia 252 icarioides missionensis, Icaricia 252 icarioides missionensis, Plebejus 252 icarioides moroensis, Icaricia 252 icarioides pheres, Icaricia 252 ichikawai, Coreobagrus 76 ichthyaetus, Ichthyophaga 148 Ichthyomys 24, 143 Ichthyophaga 148 ICTALURIDAE 75, 168, 203, 247 Ictalurus 75, 203, 247 ICTERIDAE 56, 163, 182 icterotis, Ognorhynchus 41 Icterus 56, 163 idae, Ardeola 147 idaeoides, Graphium 105 idahoensis idahoensis, Oreohelix 239 idahoensis, Brachylagus 146 idahoensis, Pyrgulopsis 211 idalia, Speyeria 253 Idea 104, 171 identatus, Stygabramus 89 Ideopsis 104, 244 Idiodiaptomus 207 Idiomela 125 Idiostatus 109 Idiurus 145 idola, Donacia 248 Idunella 90 Iglica 116, 211 ignita, Lophura 35 ignotus, Basileuterus 163 Iguana, Allen's Cay Rock 234 Iguana, Andros Island Rock 234 Iguana, Anegada Rock 60

Iguana, Bahama Island Rock 60

Iguana, Barrington Land 59 Iguana, Booby Cay Ground 234 Iguana, Cayman Island Ground 234 Iguana, Cuban Ground 60, 234 Iguana, Exuma Island Rock 234 Iguana, Fiji Banded 59 Iguana, Fiji Crested 59 Iguana, Galápagos Land 59 Iguana, Galápagos Marine 59 Iguana, Jamaican 59 Iguana, Lesser Antillean 60 Iguana, Rhinoceros 60 Iguana, Ricord's 60 Iguana, San Salvador Rock 60, 234 Iguana, Turks and Caicos Ground 234 Iguana 60 IGUANIDAE 59, 182, 199, 234, 246 Iguanognathus 61 iheringi, Formicivora 46 iheringi, Monodelphis 135 iheringi, Radiodiscus 214 ijimae, Phylloscopus 51 ikei, Maccullochella 82 ileile, Hyosciurus 22 ilicifolia, Phyllodesma 102 ilidzensis slovenicus, Niphargus 237 iliensis, Ochotona 28 iliffei, Cocoharpinia 90 iliffei, Typhlatya 93 Illadopsis, Rufous-winged 159 Illadopsis 159 illidgei, Acrodipsas 102 illyricus, Leuciscus 72 Ilydon 80 imaizumii, Rhinolophus 11 imbellis, Ammodillus 23 imberbis, Muriculus 25 imberbis, Tragelaphus 131 imbricata, Eretmochelys 63 imbricata, Meladema 98 imbriferna, Tilapia 86 imeldae, Notropis 73 imitata, Phreatodrobia 116 imitator, Accipiter 33 imitator, Tryonia 212 imitratix, Lampedusa 123 imitratrix, Lutilodix 125 immaculata, Deloneura 186 immaculata, Eremarionta 125 immaculata, Pnoepyga 160 Imnadia 92 imogene, Pharotis 13 Impala 130 Impala, Black-faced 227 impar, Delma 60 impavidus, Marmasaps 135 impennis, Alca 180 imperator imperator, Saguinus 221 imperator, Uromys 27 imperfecta, Caldwellia 124 imperforata, Partula 191 Imperial-pigeon, Bismarck 151 Imperial-pigeon, Chestnut-bellied39 Imperial-pigeon, Christmas Island39 Imperial-pigeon, Finsch's 151 Imperial-pigeon, Grey 39 Imperial-pigeon, Marquesan 39

Imperial-pigeon, Mindoro 39 Imperial-pigeon, New Caledonian 39 Imperial-pigeon, Polynesian 39 Imperial-pigeon, Spotted 39 Imperial-pigeon, Timor 39 Imperial-pigeon, Vanuatu 39 imperialis, Amazona 40 imperialis, Campephilus 44 imperialis, Fissilicreagris 89 imperialis, Gallinago 150 imperialis, Lophura 35 imperialis, Speleomantes 167 imperialis, Teinopalpus 171 implicata, Harmogenanina 125 implicata, Pachycephala 159 impressa, Elimia 117 impressa, Manouria 65 improvisum, Chiroderma 11 imula, Arubolana 97 inae, Vitrea 217 lnanga, Dwarf 76 Inca, Black 43 Inca-finch, Grey-winged 162 Inca-finch, Little 162 incanus, Marmosops 135 Incaspiza 162 incerta, Pronesopupa 216 incerta, Pterodroma 30 Incerticyclus 188 incisa, Paramiella 212 incisus, Glossolepis 78 incomitatus, Artibeus 194 incomptus, Orconectes 94 inconspicua, Gulella 216 incurvata, Somatochlora 171 incurvatus alleghaniensis, Ophiogomphus 238 incurvatus, Ophiogomphus 171 indefessus, Nesoryzomys 25 indica dealbata, Ratufa 245 indica elphinstoni, Ratufa 245 indica, Chitra 65 indica, Cylindraspis 182 indica, Eupodotis 37 indica, Ratufa 22 Indicator 154 INDICATORIDAE 44, 154 indicus, Gyps 148 indicus, Melanobatrachus 67 indicus, Monopterus 205 indicus, Tapirus 19 indigo, Peripatoides 109 indioensis cathedralis, Eremarionta Indolestes 107 Indoreonectes 203 Indotestudo 65 Indri 14 indri, Indri 14 Indri 14 INDRIDAE 14, 221, 241 inepta, Cylindraspis 182 inepta, Megacrex 198 inermis argyropus, Hydropotes 227 inermis inermsis, Hydropotes 227 inermis testii, Orconectes 237 inermis, Epinephelus 82

inermis, Hydropotes 141 inermis, Nematogenys 204 inexpectata, Aegista 213 inexpectata, Torreornis 55 inexpectatus, Hipposideros 10 inexspectata, Tyto 198 infantilis, Trimerotropis 108 infelix, Monarcha 159 infernale, Ophisternon 82 infernalis, Styx 252 infirma, Assiminea 114 inflata, Beddomeia 114 inflata, Trochidrobia 117 inflatula, Diplommatina 210 inflatus, Potamilus 112 infrapunctatum, Oligosoma 165 infrequens, Nesopupa 216 infucata, Quincuncina 172 infusca, Balantiopteryx 10 infuscata, Synallaxis 45 infuscatus, Henicopernis 148 infuscus, Platyrrhinus 137 ingens, Diclidurus 10 ingens, Dipodomys 23 ingens, Hippocampus 81 ingens, Macrotarsomys 24 Ingolfiella 90 INGOLFIELLIDAE 90 ingrahami, Geocapromys 28 Inia 19 inmemoriam, Cyprinodon 183 innesi, Omphalotropis 256 innotata, Aythya 32 innoxius, Eptesicus 12 inopinata, Thaumatoneura 107 inopinata, Westraltrachia 122 inopinatum, Polyplectron 35 inopinatus, Artibeus 137 inops, Rhinolophus 194 inornata, Bitis 62 inornata, Columba 38 inornata, Lophura 35 inornata, Pinaroloxias 55 inornata, Uma 60 inornatus psammophilus, Perognathus inornatus, Epicrates 165 inornatus, Philemon 162 inquilina, Myrmecia 101 inquilina, Oxyepoecus 101 inquilina, Pheidole 101 inquilina, Serrastruma 101 inquilinum, Monomorium 101 insculpta, Carettochelys 62 insculpta, Clemmys 64 INSECTA 98, 133, 169, 185, 208, 237. 244, 247 INSECTIVORA 5, 136, 177, 193, 241 inseperata, Lytta 249 insignis, Ardea 31 insignis, Hirasea 124 insignis, Polihierax 149 insignis, Potamonectes 249 insignis, Rhinomyias 52 insignis, Saxicola 52 insignis, Zenkerella 145 insolita, Newnhamia 98

insonus, Sylvilagus 29 Insuetophrymus 67 insulana, Volvarina 213 insulans, Heteropsomys 178 insulanus, Psacadonotus 109 insularis, Aplonis 164 insularis, Barkudia 200 insularis, Boninthemis 107 insularis, Bothrops 62 insularis, Dipodomys 23 insularis, Eupsophus 201 insularis, Gerygone 181 insularis, Gonyostomus 128 insularis, Junco 55 insularis, Lepus 146 insularis, Macroperipatus 109 insularis, Nesidiolestes 251 insularis, Otus 42 insularis, Procyon 17 insularis, Pteropus 9 insularis, Ptilinopus 39 insularis, Strongylognathus 102 insularum, Myotis 194 insulata, Sporophila 55 insulatus, Platymantis 67 insulensis, Mesocyclops 92 Insulivitrina 128, 175 intercastellanus, Phalanger 219 intercisa, Xerarionta 125 interioris, Lucania 80 intermedia ijimai, Leucorrhinia 238 intermedia, Belgrandiella 188 intermedia, Bythinella 188 intermedia, Callithrix 241 intermedia, Gila 167 intermedia, Kerivoula 138 intermedia, Nycteris 136 intermedia, Psittacula 41 intermedia, Quadrula 255 intermedius, Choeroniscus 137 intermedius, Crocodylus 58 intermedius, Glossogobius 87 intermedius, Micropteropus 9 intermedius, Neodiaptomus 92 internigrans, Perisoreus 58 interparietalis, Peromyscus 26 interrupta, Elimia 117 interstitialis, Sphaerolana 97 interveniens, Elimia 117 intonsa, Aegista 213 intortus, Lanistes 114 intricatus, Carabus 169 intrusa, Gulella 216 inundata, Amblyrhiza 179 inunguis, Trichechus 19 inustus, Dendrolagus 193 inutilis, Hemicycla 133 investigator, Uropsilus 8 invictus, Marmasops 135 io, Balantiopteryx 136 io, Ia 138 *Io* 118 Iodopleura 46 Iolaus 103, 170, 252 Iomys 22 iota, Norfolcioconch 123

ioxantha, Fletcherana 252 iphis, Pomarea 52 iphitas, Eurytides 105 ipnaeum, Plagiodontia 179 iracunda, Metallura 153 Iranocypris 72 iredalei, Acanthiza 49 Iredaleoconcha 125 irena, Miramella 108 irene, Poecilmitis 103 ireneae, Otus 42 IRENIDAE 48, 157 iridescens, Amphorella 124 irideus, Leucaspius 202 irideus, Pseudophoxinus 203 Iridosomis 162 iriomotensis, Chlorogomphus 106 iris, Amblysomus 241 iris, Melanotaenia 243 iris, Pipra 156 iris, Psitteuteles 41 irma, Macropus 135 irregularis, Aaadonta 214 irregularis, Cycloptilum 108 irridescens, Levuana 187 irridescens, Paramelania 119 irrorata, Diomedea 146 irrupta, Caluromysiops 3 irvineanus, Bothriembryon 121 irvingi, Cesonia 207 irwini, Percilla 206 isabelae, Graellsia 208 isabella, Funisciurus 142 isabella, Sylvisorex 8 isabellae, Oriolus 57 isabellus, Diclidurus 136 isarogensis, Rhynchomys 27 Ischnura 106 ishidai, Macromia 106 ishigakiana ishigakiana, Planaeschna ishigakiana nagaminei, Planaeschna 237 ishikawae, Rana 67 ishikawai, Oncorhynchus 77 ishmaeli, Labrochromis 184 isidori, Oroaetus 148 isletae, Napaeus 121 isolata, Jardinella 116 isolata, Pyrgulopsis 211 isolatum, Cristilabrum 122 isolatum, Tasmanoplectron 108 Isolobodon 28, 179 Isomma 107 Isonychia 250 Isoodon 4, 219 Isopachys 200 Isophya 109 Isopod, Bat Cave 97 Isopod, Clifton Cave 96 1sopod, Lee County Cave 97 Isopod, Madison Cave 97 Isopod, Nickajack Cave 97 Isopod, Rye Cove Cave 97 Isopod, Socorro 185 1SOPODA 96, 185, 208, 237, 244, 247

72

Iotichthys

Isothrix 146, 197 isseli, Pelomys 25 istapantap, Mallomys 143 Isthmomys 143 isura, Lophoictinia 33 itajara, Epinephelus 82 italicus, Strongylognathus 102 italowiana, Pleuroxia 174 iteratus, Mixophyes 67 ithaginis, Dorcus 249 Ithamar 251 ITHONIDAE 254 itonis nakashimai, Chamalychaeus 239 ivelli, Edwardsia 217 iversoni, Mauremys 200 iwame, Oncorhynchus 204 iwasakii, Pareas 200 Ixalodectes 109 Ixobrychus 147, 179 Ixos 48, 157 izardi, Colophon 170 izecksohni, Hyla 201 Jabouilleia 51 Jacamar, Coppery-chested 44 Jacamar, Three-toed 44 Jacamaralcyon 44 jaccetanicus, Zonitoides 128 Jack, Deepwater 82 jackieburchi, Partula 191 Jackrabbit, Black 146 Jackrabbit, Tehuantepec 28 Jackrabbit, White-sided 146 Jacksonena 173 jacksonense, Helisoma 256 jacksoni, Bdeogale 16 jacksoni, Euplectes 164 jacksoni, Praomys 197 jacksoni, Sorex 7 jacksoni, Steatomys 27 jacksoni, Taenioides 169 jacksoniana, Obovaria 172 jacobi, Bulimulus 126 jacobita, Oreailurus 16 jacquinoti, Pachycephala 159 jacucaca, Penelope 149 Jaculus 143 jacutinga, Pipile 34 jaegeri, Anetia 170 jagara, Euastacus 96 Jaguar 140 Jaguarundi, Texas 223 jamaicensis, Plicatoperipatus 171 jamesae, Beloneuria 254 jamesi classensi, Lepidochrysops 252 jamesi jamesi, Lepidochrysops 252 jamesi, Phoenicopterus 31 jamoerensis, Varia 83 janaslini, Glyptorhagada 173 janetta, Bathyergus 145 jankowskii, Emberiza 54 janthina, Columba 151 japonensis, Grus 36 Japonia 210 japonica, Bombycilla 157 japonica, Geoemyda 64 japonica, Luehdorfia 171 japonicus, Andrias 68

japonicus, Glirulus 28 japonicus, Hippocampus 81 japonicus, Salvelinus 77 Jardinella 116 jarutanini, Schistura 75 jasperi, Eleutherodactylus 201 jaurffreti, Elasmias 213 javanica, Manis 142 javanica, Nycteris 10 javanicus, Bos 20 javanicus, Charadrius 150 javanicus, Lacconectus 248 javanicus, Leptoptilos 31 javanus, Glischropus 138 javensis, Batrachostomus 153 javensis, Megalaima 154 Jay, Azure 164 Jay, Beautiful 164 Jay, Dwarf 58 Jay, Lidth's 58 Jay, Sichuan 58 Jay, Tufted 164 Jay, White-throated 58 jayakari, Hemitragus 21 jayakari, Hippocampus 81 jayana, Lithasia 118 jayensis, Elliptio 255 jeanae, Kiwaia 252 jeanneae, Discoglossus 246 jeanneli, Elaphoidella 96 jeeba, Phasmodes 109 jeffersoni, Orconectes 94 jefferyi, Lepidochrysops 103 jefferyi, Pithecophaga 33 -jeffreysi, Bellamya 119 jemezanus, Notropis 202 jemlahicus, Hemitragus 21 jenkinsi, Percina 84 Jenkinsia 71 jenkinsii, Crocidura 6 jentinki, Cephalophus 21 jentinki, Sundasciurus 22 jerdoni, Aviceda 148 jerdoni, Garrulax 159 jerdoni, Paradoxurus 18 jerdoni, Saxicola 160 jeresae, Suboestophora 126 Jery, Wedge-tailed 159 jesseana, Libellula 107 jesswiseae, Jardinella 116 jewetti, Farula 255 Jewfish 82 jimenensis, Trochoidea 175 jobiensis, Rattus 145 joffrei, Pipistrellus 13 johannae, Coregonus 183 johannae, Tangara 163 johannis, Carduelis 56 johannis, Pleurobema 111 johnii, Trachypithecus 15 johnsoni, Pseudomys 144 johnstonei, Otomops 13 johnstoni, Galaxias 76 johnstoni, Genetta 195 johnstoni, Okapia 141 johnstoniae, Trichoglossus 41 johorensis, Chaerephon 139

Joiceva 103 Jokajdon 214 jollyi, Daphnia 90 jonesi, Elimia 117 jonesi, Hipposideros 136 jonesi, Orconectes 94 jonesi, Ptychobranchus 112 jonesianus, Mesodon 215 jonklaasi, Lepidocephalichthys 74 jonklaasi, Sicyopus 207 jonquillaceus, Aprosmictus 151 jophon, Atrophaneura 105 jordani, Mycteroperca 83 jordani, Papilio 105 josephi, Tyrrheniella 126 josephinae, Cysticus 213 josephinae, Hemitriccus 156 jouyi, Columba 180 jubata, Neochen 147 jubatus hecki, Acinonyx 223 jubatus venaticus, Acinonyx 223 jubatus, Acerodon 8 jubatus, Acinonyx 16 jubatus, Eumetopias 17 jubatus, Rhynochetos 37 iucunda, Bellamya 119 juddii, Achatinella 188 jugalis, Oreohelix 126 jugorum, Megalagrion 187 jugularis, Mormopterus 13 julianae, Amblysomus 5 julii, Ampelita 120 julisia, Fundulus 80 jullieni, Probarbus 73 Jumprock, Bigeye 203 juncea, Achatinella 188 Junco, Guadalupe 55 Junco 55 juneae, Murunducaris 133 jungermanniae, Pasmaditta 216 Jungle-flycatcher, Brown-chested52 Jungle-flycatcher, Henna-tailed160 Jungle-flycatcher, Russet-backed160 Jungle-flycatcher, Slaty-backed52 Jungle-flycatcher, Streaky-breasted52 Jungle-flycatcher, White-browed52 Jungle-flycatcher, White-throated52 Junglefowl, Grey 149 junoniae, Columba 38 junori, Eleutherodactylus 67 Juscelinomys 24, 143 juvencus, Sundasciurus 22 juvenisanguis, Moitessieria 116 kaaeana, Partulina 213 kaapori, Cebus 15 kaboboensis, Apalis 198 kabylica, Myrmica 101 kachuga, Kachuga 64 Kachuga 64, 166, 200 Kadarsanomys 143 kaempferi, Hemitriccus 47 kaestneri, Grallaria 46 Kagu 37 kahutarae, Hoplodactylus 165 kahuziensis, Dendromus 143 kailolae, Craterocephalus 243 Kaiser-1-Hind 171

Kaiser-1-Hind, Golden 208 Kaka, New Zealand 41 Kaka, Norfolk Island 181 Kakapo 181 kalalauensis, Carelia 189 Kalania 251 kalawatseti, Oregonichthys 168 Kaliella 125 kalimna, Zonocypretta 97 kalinowskii, Dasyprocta 197 kalinowskii, Gracilinanus 193 kalinowskii, Mormopterus 13 kalinowskii, Nothoprocta 29 Kaluga 70 Kamao 51 kamtschaticus, Arctodiaptomus 91 kanabense, Oxyloma 128 kanawhae, Etheostoma 169 Kandar 74 Kangaroo, Eastern Grey 220 Kangaroo, Western Grey 220 Kangaroo-rat, Morro Bay 231 kapalgensis, Taphozous 10 Kapcypriodopsis 97 kaplani, Aloeides 102 kaplani, Poecilmitis 103 kaplani, Thestor 103 kaputarensis, Cralopa 214 karamojae, Apalis 49 karawajevi, Strongylognathus 102 karenae, Sphaerolana 97 kargesi, Streptocephalus 207 karkloof capensis, Charaxes 253 karlkoopmani, Chiropodomys 23 karlschmidtii, Eleutherodactylus 67 Karocolens 248 karokorum, Vespericola 215 kasaicus, Mus 25 kasneri, Scelotes 61 katalo, Puntius 74 Katapa-tapa 74 Katechonemertes 128 katherina, Acanthiza 132 Katolo 74 Katrana 243 Katria 86 Katydid, Antioch Dunes Shieldback 187 Katydid, Big Pine Key Conehead 109 Katydid, Keys Short-winged Conehead Katydid, Middlekauf's Shieldback109 Katydid, Nihoa Banza Conehead 109 Katydid, Remote Conehead 109 Katydid, Santa Monica Shieldback 109 Kauai, Fabulous Green Sphinx of 186 kauaiensis, Nesomimesa 251 kauaiensis, Nesopupa 216 kauaiensis, Nesotocus 248 kaufmanni, Pseudoscaphirhynchus 70 Kawanphila 109 Kayasi, Dere 72 kazbegica, Sicista 197 kaznakovi, Vipera 62 Kea 152 keadicus, Leuciscus 72 keavi, Gallicolumba 39 Kedestes 252

Keelback, Boonsong's 200 Keelback, Smith's Mountain 200 keiensis, Oligolepis 169 kelioides, Encheloclarias 76 kelleyi, Macranous 159 kelsoensis, Ammopelmatus 108 kelsoensis, Macrabaenetes 108 kemali, Hemigrammacapoeta 243 kempi, Pedostibes 66 kempii, Lepidochelys 63 kempseyensis, Rhophodon 214 Kenkia 256 KENKIIDAE 192, 256 kentuckiensis, Orconectes 94 kenyacala, Chalinolabus 194 kenyoni, Phalacrocorax 198 Keppe, Leka 86 keri, Sericornis 132 Kerivoula 12, 138, 194 kermanensis, Microtus 25 kerri, Agrotis 186 kerriae, Crypturellus 29 kerschneri, Hauffenia 116 kershawi, Beddomeia 114 kervillei, Strongylognathus 102 kessleri, Gabio 202 kessleri, Neogobius 206 kessneri, Beddomeia 114 Kestrei, Lesser 33 Kestrel, Mauritius 34 Kestrel, Seychelles 33 Ketupa 42, 152 keyensis, Rhinolophus 11 kiang holdereri, Equus 242 kiang kiang, Equus 225 kiang polyodon, Equus 225 Kiang, Eastern 242 Kiang, Southern 225 Kiang, Western 225 kibalensis, Zoothera 242 Kidneyshell, Southern 112 Kidneyshell, Triangular 112 kieferi, Elaphaidella 96 kieferi, Stygodiaptomus 92 kieneri, Paretroplus 85 kieneri, Teramulus 205 kikuchii, Volemys 27 kikuzatoi, Opisthotropis 61 kiliani, Cheirodon 203 kilimensis, Tropodiaptomus 92 Killifish 243 Killifish, Ash Meadows 184 Killifish, Caprivi 79 Killifish, Scaleless 205 Killifish, Waccamaw 80 kiloana, Spelaseorchestia 90 kilusa, Apaturopsis 253 Kimberleyeleotris 169 kimberleyensis, Barbus 71 kimberleyensis, Hypseleatris 169 kimberleyensis, Syncomistes 169 Kimboraga 122 Kimminsoperla 254 kinabaluensis, Spilornis 198 King-parrot, Moluccan 151 Kingbird, Giant 47 Kingfisher, Blue-black 154

Kingfisher, Blue-capped 44 Kingfisher, Blyth's 44 Kingfisher, Brown-winged 153 Kingfisher, Chestnut-bellied 44 Kingfisher, Cinnamon-banded 154 Kingfisher, Indigo-banded 153 Kingfisher, Lazuli 44 Kingfisher, Mangaia 44 Kingfisher, Marquesan 44 Kingfisher, Moustached 44 Kingfisher, Philippine 44 Kingfisher, Rufous-lored 44 Kingfisher, Ryukyu 246 Kingfisher, Silvery 44 Kingfisher, Sombre 154 Kingfisher, Spotted 153 Kingfisher, Talaud 154 Kingfisher, Tuamotu 44 kingi, Cylindrovertilla 245 kingsburyae, Aglaodiaptamus 91 Kinixys 166, 200 kinlochi, Aaadonta 214 KINOSTERNIDAE 64, 166 Kinosternon 64, 166 kintorei, Egernia 60 Kioea 181 kirbyi, Parantica 244 kirki, Chytra 119 kirtlandii, Dendroica 55 kishinauyei, Eumeces 165 kisserensis, Philemon 199 kissi, Tropodiaptomus 92 kitae, Neotrichia 254 kitaiwojimanum, Elasmias 120 kitcheneri, Pipistrellus 139 Kite, Jamaican 105 Kite, Red 242 Kite, Square-tailed 33 Kittiwake, Red-legged 38 Kiunga 78 kivuana, Crocidura 6 Kiwaia 252 Kiwi, Brown 29 Kiwi, Great Spotted 29 Kiwi, Little Spotted 29 Kiyi 77 kiyi, Coregonus 77 kiyokoae, Kondoraphe 212 klagesi, Myrmotherula 155 klagesi, Parides 208 klassika, Ideopsis 244 klatti, Tylognathus 203 klazenfurtensis, Graziana 116 kleinmanni, Testudo 65 kleinschmidti, Erythrura 57 kleinzellensis, Iglica 116 klemmi, Pseudamnicola 116 Klipfish, Bot River 87 Klipspringer 131 Klipspringer, Western 229 klossii, Hylobates 16 kluchorica, Sicista 197 kneri, Chondrostoma 202 Knipolegus 156 Knipowitschia 87, 206 knorri, Archachatina 213 knudseni, Carelia 189

Koa-finch, Greater 181 Koa-finch, Lesser 181 Koala 135 koarana, Ruatara 123 Kob 131 kob kob, Kobus 229 kob leucotis, Kobus 229 kob thomasi, Kobus 229 Kob, Buffon's 229 kob, Kobus 131 Kob, Uganda 229 Kob, White-eared 229 kobayashii, Eptesicus 194 kobelti, Cryptazeca 123 Kobus 130, 131, 141, 229 kochi, Pitta 47 kocinus, Ramiheithrus 255 Kodkod 16 koepckeae, Cacicus 56 koepckeae, Phaethornis 153 Kogia 242 kohchangae, Rana 201 kohni, Conus 213 Kokako 58 KOKIRIIDAE 254 Kokopu, Giant 76 Kokopu, Shortjawed 76 kollari, Synallaxis 45 kolleruensis, Heliodiaptomus 92 komadori, Erithacus 158 Komarekiona 109 KOMAREKIONIDAE 109 komenskyi, Belgrandiella 211 komodoensis, Varanus 61 Komodomys 24 kona, Chloridops 181 kondana, Millardia 25 Kandaa 217 Kondoconcha 123 kondoi, Paramiella 212 Kondoraphe 212 kondorum, Hangalua 217 kondorum, Kondoa 217 Konia 85 Konve 85 Kookaburra, Shovel-billed 198 koolanensis, Kimboraga 122 kaopmani, Rattus 145 kooringensis, Glyptorhagada 122 koratense, Lygosoma 200 koreanus, Strongylognathus 102 kororensis, Semperdon 214 Korrigum 228 koslowi, Babax 158 koslowi, Emberiza 162 koslowi, Ochotona 28 kosswigi, Turcinemacheilus 203 Kosswigichthys 205 kosteri, Tryonia 212 Kotso 85 Kotsovato 85 kottae, Tilapia 86 kottelati, Tondanichthys 81 Kouprey 20 Kowari 3 kozlovi, Salpingotus 143 kozlovi, Sorex 7

kraemeri, Spilocuscus 241 krameri, Umbra 76 kratochvilli, Strongylognathus 102 kraussei, Epimyrma 100 krefftii, Lasiorhinus 4 kreitneri, Fenauilia 118 kretseri, Malpulutta 132 krishnai, Horaglanis 76 kronei, Phyllascartes 47 kronei, Pimelodella 204 krueperi devta, Pieris 253 krumholzi, Gambusia 80 kruyti, Adrianichthys 80 krybetes, Beddomeia 114 kubaryi, Palaina 210 kubaryi, Corvus 58 kubaryi, Gallicolumba 39 kubaryi, Kubaryiellus 214 Kubaryia 210 Kubaryiellus 214 kubokaiya, Macromia 106 kuda, Hippocampus 81 Kudu, Greater 131 Kudu, Lesser 131 kuehni, Myzomela 199 kuehni, Zosterops 162 kuekenthali, Parantica 104 kuesteri, Trochamorpha 217 kuhli, Axis 20 kuhli, Callithrix 241 Kuhlia 244 kuhlii, Vini 41 **KUHLIIDAE 244** kuhlmanni, Liolaemus 199 kuhni, Liberiictis 17 kuhnsi, Perdicella 213 kulalensis, Zosterops 54 Kulan 225 Kulan, Gobi 225 Kulan, North Mongolian 225 Kultarr 193 Kululu 86 kummerloewei, Hemidiaptomus 207 kunigamiensis, Oligoaeschna 106 kunsi, Monodelphis 3 Kunsia 24 Kupea 253 kupeensis, Telophorus 49 Kupeornis 51, 159 kurodai, Nabuea 210 kuroiwae, Goniosaurus 59 Kusaiea 215 kusaieana, Sinployea 214 kuschei, Nesosydne 251 kusnotoi, Megaerops 9 kutikina, Phrantela 116 kutteri, Chalepaxenus 100 kutteri, Doronomyrmex 100 kutteri, Teleutomyrmex 102 Kyidris 100 labeamajor, Probarbus 203 labeaminor, Probarbus 203 Labeo, Green 72 Labeo 72 labialis, Austrelaps 61 labialis, Delma 60 Labidura 99

LABIDURIDAE 99 labiosa, Paratherina 78 labiosus, Cyprinodan 79 labordi Furcifer 59 labradorius, Camptorhynchus 179 LABRIDAE 87 labridens, Cichlasoma 85 Labrochromis 184 labrusca, Partula 191 Lacconectus 248, 249 Laccanectus 248, 249 laccophiloides, Lacconectus 249 Lace-lid, Australian 66 lacera, Lagochila 183 lacernulata, Leucopternis 33 Lacerta 60, 165, 200, 234, 243 LACERTIDAE 60, 165, 200, 234, 243, 246 lacertosa, Woodfordia 161 lacheineri, Graziana 244 lachneri, Noturus 75 Lachnolaimus 87 laciniosa, Actinella 215 lacon, Euploea 104 lactea, Polioptila 160 lacus-coerulei, Tasmanophlebia 99 lacustra, Capnia 254 Lacustrelix 173 lacustris, Craterocephalus 78 lacustris, Melanotaenia 78 lacustris, Paranaspides 90 lacustris, Syrnolopsis 119 lacustris, Taskropsyche 254 ladigesi, Telmatherina 79 Ladigesocypris 72 Ladronellum 214 Laephotis 12, 138 laeta, Elimia 117 laetissima, Pseudocampylaea 190 laevigata, Georissa 209 laevigata, Leiostyla 127 laevigata, Omphalotropis 210 laeviusculus, Oclandius 248 lafresnayanus, Gallirallus 36 lagdeni, Malaconotus 157 Lagenadelphis 195 Lagenorhynchus 195, 242 Lagidium 145 lagniappe, Procambarus 95 Lagocephalus 207 Lagochila 183 LAGOMORPHA 28, 146, 179, 197, 233, Lagonosticta 163 Lagorchestes 4, 135, 177, 219, 220 Lagostrophus 4, 220 Lagothrix 15, 222, 241 lagotis, Macrotis 4 lagotricha cana, Lagothrix 222 lagotricha lugens, Lagothrix 222 lagotricha poeppigii, Lagothrix 222 lagotricha, Lagothrix 241 laidlawi, Epiophlebia 106 laii, Neodiaptomus 92 lakedownensis, Leggadina 143 Lalage 157 Lama 226 Lambis 212

lamellata, Diplommatina 210 lamellicosta, Taheitia 212 Lamellidea 120, 188, 213 lamellosa, Leiostyla 191 Laminella 121 laminirostris, Andigena 154 lamlanensis, Himeroconcha 214 Lamna 69 LAMNIDAE 69 Lamnifera 123 LAMNIFORMES 69 lamottei, Hipposideros 194 lamottei, Micropotamogale 5 Lamottemys 24 Lampadia 125 Lampedusa 123 Lampetra 167, 183, 201, 246 Lampmussel, Alabama 111 Lampmussel, Yellow 111 lampra, Myrmica 101 Lamprey, Brook 167 Lamprey, Carpathian Brook 167 Lamprey, Greek Brook 69 Lamprey, Kern Brook 167 Lamprey, Lake 201 Lamprey, Lombardy Brook 69 Lamprey, Miller Lake 183 Lamprey, Non-parasitic 69 Lamprey, Pacific 246 Lamprey, River 167 Lamprey, Ukranian Brook 201 Lamprey, Vladykov's 167 Lamprocystis 124, 215 lamproides, Tasmaphena 127 Lamprolia 51 lampropeltis lampropeltis, Erpetogomphus 238 lampropeltis, Erpetogomphus 244 Lamprophis 61, 165 Lamprotornis 164 Lampsilis 111, 172, 238, 255 LAMPYRIDAE 249 lanaiensis, Drosophila 185 lanaiensis, Myadestes 51 lanaiensis, Oliarus 251 lananensis, Fusconaia 172 lanaoensis, Puntius 74 lanatus, Caluromys 135 Lance, Altamaha 172 Lance, Yellow 172 Lancehead, Golden 62 lancelini, Ctenotus 60 lanceolata, Elliptio 172 lanceolata, Micromonacha 154 lanceolatus, Epinephelus 82 lanceolatus, Potamonectes 249 lanceolatus, Spizaetus 148 lancifer, Pegasus 205 langbianis, Crocias 50 langei, Hyla 201 langei, Onchobarus 248 langfordi, Partula 127 langi, Pseudocordylus 165 langstoni langstoni, Shijimiaeoides252 Langur, Golden 194 Laniarius 48, 157

laniger, Antechinomys 193

laniger, Avahi 241 laniger, Dryomys 145 lanigera, Chinchilla 28 LANIIDAE 48, 157 Laniisoma 46, 246 lanio, Meladema 98 lanioides, Lipaugus 46 Lanistes 113, 114, 173, 210 Lanius 48, 157 lankae, Labeo 72 lanosa, Crocidura 241 Lantzia 113 lanuginosa, Pheidole 101 lanyoni, Phylloscartes 47 lanzai, Salamandra 69 laotum, Trachypithecus 194 laperouse, Megapodius 34 lapicida, Mordacia 201 lapponicus disjunctus, Dytiscus 248 Lapwing, Grey-headed 150 Lapwing, Javanese 180 Lapwing, Sociable 37 lar, Hylobates 140 Larga, Cachorrito de Dorsal 80 Largemouth, Lowveld 132 Largemouth, Orange-fringed 84 laricis, Oecanthus 108 LARIDAE 38, 131, 150, 180 Lariscus 22, 142 Lark, Archer's 48 Lark, Ash's 48 Lark, Botha's 48 Lark, Degodi 48 Lark, Friedmann's 157 Lark, Obbia 157 Lark, Raso 47 Lark, Red 47 Lark, Rudd's 48 Lark, Sclater's 157 Lark, Short-clawed 157 Lark, Sidamo 48 Lark, Williams's 157 larselli, Plethodon 201 Larus 38, 131, 150 larvata, Sabanjewia 168 larvatus, Nasalis 15 laseroni, Georissa 112 LASIOCAMPIDAE 102, 208 Lasiopodomys 143 lasiopterus, Nyctalus 138 Lasiorhinus 4 Lasiurus 12, 138, 245 lasius, Bassaricyon 17 Lasius 100 Lasmigona 111, 172, 238 lata, Hemistena 111 latastei, Rana 167 latens, Spirorbula 125 lateralis, Petrogale 220 lateralis euryxanthus, Masticophis 246 lateralis hacketti, Petrogale 220 lateralis lateralis, Petrogale 220 lateralis pearsoni, Petrogale 220 lateralis wortmanni, Spermophilus 231 lateralis, Characodon 80 lateralis, Diplommatina 210 lateralis, Petrogale 241

lateralis, Rheocles 205 Laterallus 36, 149 laternarius, Pegasus 81 latesignata obliviosa, Cicindela 248 lathami, Calyptorhynchus 40 Lathamus 41 Lathrotriccus 47 Latiaxis 173 Laticauda 62 laticincta, Platysteira 52 laticosta, Omphalotropis 210 latidens, Anoura 137 Latidens 9 latifasciata, Astatotilapia 84 latifasciata, Euploea 244 latifasciatus, Cyprinodon 183 latifii, Vipera 62 latifolius, Phyllostomus 137 latifrons, Microhierax 149 latifrons, Mugilogobius 87 latilabris, Omphalotropis 210 latimaculata, Rhinocypha 106 Latimeria 88 LATIMERIIDAE 88 latipes, Acanthomyops 99 latipes, Borbanibis 179 latipleurum, Procambarus 95 latipunctata, Poecilia 80 latirostris, Calyptorhynchus 40 latissimus, Dytiscus 98 latistriata, Stachyris 52 latona, Crocidura 6 latos concavus, Empetrichthys 247 latos latos, Empetrichthys 247 latos pahrump, Empetrichthys 247 Latoucheornis 162 latro, Birgus 207 latro, Ctenomys 145 laucaensis, Orestias 168 laucaensis, Trichomycterus 168 laudabilis, Icterus 163 Laughingthrush, Ashy-headed 50 Laughingthrush, Barred 159 Laughingthrush, Black-hooded 50 Laughingthrush, Brown-capped 198 Laughingthrush, Chestnut-backed 159 Laughingthrush, Collared 50 Laughingthrush, Grey 159 Laughingthrush, Grey-breasted 159 Laughingthrush, Red-tailed 159 Laughingthrush, Red-winged 159 Laughingthrush, Rufous-breasted 159 Laughingthrush, Rufous-fronted 159 Laughingthrush, Snowy-cheeked 50 Laughingthrush, Spot-breasted 159 Laughingthrush, Striped 159 Laughingthrush, White-speckled50 Laughingthrush, Wynaad 159 Laughingthrush, Yellow-throated 159 launcestonensis, Anoglypta 123 launcestonensis, Beddomeia 114 laurae, Myrmica 101 Lauria 127 laurina, Ningbingia 122 laurinea, Leiostyla 133 lavali, Thyroptera 11 lavaretus, Coregonus 204

Lavigera 119 lawrencei, Cordylus 165 layardi, Megapodius 34 layardi, Ptilinopus 151 layardii, Mesoplodon 196 laysanensis, Agrotis 186 laysanensis, Anas 32 laysanensis, Hedylepta 186 laysanensis, Hypena 186 laysanensis, Oedemasylus 185 lazuli, Todirhamphus 44 leacockiana, Discula 124 leadbeateri, Cacatua 152 leadbeateri, Gymnobelideus 5 Leaf-warbler, Hainan 51 Leaf-warbler, Ijima's 51 Leaf-warbler, San Cristobal 160 Leaf-warbler, Sombre 51 Leaf-warbler, Tytler's 160 Leafbird, Blue-masked 157 Leafbird, Philippine 48 Leafhopper, Red-veined Prairie 251 Leafshell 187 Leafshell, Cumberland 187 Leafwing, Andaman 253 Leafwing, Florida 253 leahi, Genophantis 186 leahi, Nesosydne 251 leai cheatumi, Stenotrema 239 leander, Anotomys 23 leari, Anodorhynchus 40 Leatherback 63 leche kafuensis, Kobus 229 leche leche, Kobus 229 leche robertsi, Kobus 229 leche smithemani, Kobus 229 leche, Kobus 131 Lechriodus 167 Lechwe 131 Lechwe, Black 229 Lechwe, Kafue 229 Lechwe, Nile 141 Lechwe, Red 229 Lechwe, Roberts' 229 ledanti, Sitta 53 Lednia 254 Leech, Medicinal 171 leechi, Chaetarthria 249 leechi, Hydroporus 248 lefevrei, Dysnomia 187 lefkodemonaki, Niphargobates 90 legatus, Diplothrix 143 legendrei, Ratsirakia 244 Leggadina 143 leguati, Aphanapteryx 180 Leguminaia 255 lehuiensis, Achatinella 188 leichhardti, Scleropages 167 Leimacomys 24 Leiocephalus 182 LEIODIDAE 99 Leiolopisma 60, 182 Leiopelma 66, 167, 243 LEIOPELMATIDAE 66, 167, 243 leiopomus, Cottus 82 Leiopotherapon 168, 169 Leiostyla 245

Leiostyla 127, 133, 191, 216, 245 Leipoa 34 leisleri, Nyctalus 138 leitheuseri, Procambarus 95 leithii, Aspideretes 166 lekaguli, Hipposideros 136 lemasnei, Myrmica 101 lembeyei, Polioptila 160 Lemiox 111 lemkei, Rhizoplagiodontia 179 lemmeri, Lithophane 253 Lemming, Kansas Bog 233 Lemming, Nebraska Bog 233 Lemming, Ogilvie Mountains Collared 197 Lemming, St. Lawrence Island Collared Lemming, Umnak Island Collared 232 Lemming, Unalaska Island Collared 232 lemmingii, Rutilus 74 lemniscatus, Liolaemus 199 Lemniscia 125, 133, 215 Lemniscomys 24, 143, 197 lemosi, Cypseloides 43 Lemur, Alaotran Gentle 220 Lemur, Black 13, 220 Lemur, Broad-nosed Gentle 14 Lemur, Brown 241 Lemur, Collared 220 Lemur, Crowned 13 Lemur, Flying 8 Lemur, Fork-marked 139 Lemur, Golden Bamboo 14 Lemur, Greater Sportive 241 Lemur, Grey Gentle 241 Lemur, Grey-backed Sportive 14 Lemur, Hairy-eared Dwarf 13 Lemur, Light-necked Sportive 241 Lemur, Mayotte 245 Lemur, Milne-Edwards' Sportive 241 Lemur, Mongoose 13 Lemur, Northern Sportive 14 lemur, Peltophryne 66 Lemur, Red-bellied 14 Lemur, Red-fronted 241 Lemur, Red-tailed Sportive 241 Lemur, Ring-tailed 14 Lemur, Ruffed 14 Lemur, Sanford's 220 Lemur, Sclater's 220 Lemur, Western Gentle 220 Lemur, White-collared 220 Lemur, White-footed Sportive 241 Lemur, White-fronted 241 Lemur, White-rumped Black 15 Lemur, Woolly 241 Lemur 14 LEMURIDAE 13, 220, 241, 245 lemurinus griseimembra, Aotus 221 lemurinus lemurinus, Aotus 221 lemurinus, Aotus 14 lemuroides, Hemibelideus 135 lendi, Nemacheilus 203 lendu, Muscicapa 51 lenior, Dysnomia 187 lenior, Epioblasma 110 Lenoxus 143

lentiginosus, Craterocephalus 168 Lentipes 87, 206 leo persica, Panthera 223 leo, Antechinus 135 leo, Panthera 16 leonard montana, Hesperia 252 leonardi, Anomochilus 200 leonardi, Austrocordulia 106 leonensis, Afrithelphusa 95 leonina, Peripatopsis 187 leoninum, Argiagrion 106 leontica, Prinia 52 Leontopithecus 14 Leopard, Amur 223 Leopard, Anatolian 224 Leopard, Clouded 16 Leopard, Javan 223 Leopard, North African 223 Leopard, North Chinese 223 Leopard, North Persian 223 Leopard, Snow 16 Leopard, South Arabian 223 Leopard, Sri Lankan 223 leopardina, Helicarion 125 leopardinus, Liolaemus 199 Leopardus 140, 223, 241 Leopoldamys 24 leopoldi, Catostomus 75 leopoldvillensis, Bellamya 120 lepida intermedia, Neotoma 233 lepida, Leptachatina 121 lepida, Marmosa 135 Lepidoblepharis 59 Lepidocephalichthys 74 Lepidochelys 63 Lepidochrysops 252 Lepidochrysops 103, 170, 186, 252 Lepidodactylus 59 Lepidogalaxias 168 LEPIDOGALAXIIDAE 168 Lepidomeda 72, 183, 246 LEPIDOPTERA 102, 170, 186, 208, 237, 244, 252 Lepidopyga 43 Lepidostoma 254 LEPIDOSTOMATIDAE 254 lepidothorax, Schizothorax 74 Lepidurus 97 lepidus, Natalus 137 Lepilemur 14, 241 Lepomis 247 LEPORIDAE 28, 146, 197, 234, 242 leporides, Lagorchestes 177 Leporillus 24, 178 leprosa, Canariella 133 Leptachatina 121 Leptailurus 223 leptalea, Helenoconcha 189 Leptasthenura 45, 155 Leptaxis 125, 239 LEPTESTHERIIDAE 92 Leptichnus 215 Leptinaria 175 Leptobotia 203 Leptocaris 96 LEPTOCERIDAE 187, 254 leptoceros, Gazella 21

lenticula, Percina 84

leptochila, Partula 191 LEPTODACTYLIDAE 66, 201, 243 Leptodactylus 201 Leptodea 172 leptodemas, Megalagrion 106 leptodon, Leptodea 172 Leptogomphus 107 Leptogryllus 187 Leptomys 24 LEPTONETIDAE 207 Leptonycteris 11 Leptopelis 66 Leptoperla 109 Leptopoecile 159 Leptoptilos 31 leptorhynchus, Enicognathus 152 Leptosittaca 41 leptosomus, Brachypteracias 44 leptostictus, Caseolus 133 leptosus, Pseudomyrmex 101 leptotera, Trochogyra 214 Leptothorax 100 Leptotila 39, 151 Leptoxis 118, 188 lepturus, Habromys 143 Lepus 28, 146, 197, 242 Lepyrium 116 Lerista, Allan's 60 Lerista, Mount Cooper Striped 60 Lerista 60 lermaense, Ambystoma 68 leroyi fasciata, Pseudoglessula 240 lervia ornatus, Ammotragus 245 lervia, Ammotragus 20 leseuri, Myotis 12 lesliei, Cambarellus 93 LESTIDAE 107 Lestodelphys 3 lesueur graii, Bettongia 219 lesueur lesueur, Bettongia 219 lesueur, Bettongia 4 lesueuri, Litoria 243 letha, Austroassiminea 114 Lethe 253 Lethe 253 Lethenteron 69 letholepis, Poblana 78 letitiae, Popelairia 198 letnica, Salmo 77 Leto 252 Letomola 214 letourneuxi, Valencia 80 lettiensis, Solegnathus 82 leucas, Delphinapterus 18 Leucaspius 202 Leuchocharis 126 leucichthys leucichthys, Stenodus 236 leucichthys, Stenodus 204 leucippe, Callithrix 14 Leuciscus 243 Leuciscus 72, 167, 183, 202 leucocephala, Amazona 151 leucocephala, Mycteria 147 leucocephala, Oxyura 32 leucocephalus, Aceros 44 leucocephalus, Tachveres 147

Leucocharis 190

leucochrysella, Coleophora 186 Leucocythere 98 leucodon, Nannospalax 25 leucodon, Spalax 27 leucogaster durranti, Onchomys 233 leucogaster durranti, Onychomys 233 leucogaster, Cephalophus 141 leucogaster, Sorex 7 leucogastra, Dendrocitta 164 leucogenis, Pyrrhula 163 leucogenys, Cichlopsis 158 leucogenys, Hylobates 195 leucogeranus, Grus 36 leucognaphalus, Corvus 58 leucogrammica, Ptilocichla 160 leucolaemus, Oaontophorus 149 leucolepis, Phyllastrephus 48 Leucopeza 56 leucophaeus leucophaeus, Mandrillus 222 leucophaeus mundamensis, Mandrillus 222 leucophaeus poensis, Mandrillus 222 leucophaeus, Collocalia 43 leucophaeus, Hippotragus 178 leucophaeus, Mandrillus 15 leucophaeus, Speirops 53 leucophthalmus, Larus 38 leucopis, Atlapetes 162 leucopogonis, Ceriferella 251 Leucopsar 57 leucoptera, Henicorhina 158 leucoptera, Prosobonia 180 Leucopternis 33, 148 leucopterus, Dendrocopos 154 leucopterus, Platysmurus 164 leucopterus, Pteropus 9 leucopterus, Serinus 163 leucopus ammodytes, Peromyscus 233 leucopus, Lepilemur 241 leucopus, Saguinus 14 leucopus, Sminthopsis 193 leucoraphe, Bridouxiana 119 leucorrhaphe, Achatinella 120 Leucorrhinia 238, 244 leucoryphus, Haliaeetus 33 leucoryphus, Platyrinchus 47 leucoryx, Oryx 21 leucospila, Rallina 198 leucostephes, Melidectes 162 Leucosticte 199 leucotaenia, Papilio 105 leucothoe, Partula 127 leucotis, Acerodon 8 Leuctra 254 LEUCTRIDAE 254 leucura, Macrotis 177 leucurus, Monarcha 159 leukops, Rheodytes 62 leuraensis, Eulamprus 60 leuser ssp., Bettongia 219 levassori, Graphium 105 levilineata, Partula 191 levipes, Oryzomys 144 levis, Dupontia 124 levistriata, Partula 191 levraudi, Laterallus 36

Levuana 187 Lewinia 36 lewisi, Prodontria 99 lewisii, Epioblasma 110 lewisii, Gyrotoma 117 lewisii?, Dysnomia 187 lewyana, Podocnemis 65 Lexingtonia 111, 172 leytensis, Geoemyda 64 leytensis, Micromacronus 51 lherminieri, Cichlherminia 158 lhoesti, Cercopithecus 140 lhuysii, Lophophorus 35 Liardetia 124, 215 LIAREIDAE 212 Libellula 107 LIBELLULIDAE 107, 187, 208, 238, 244 Libellulosoma 106 Libera 189 liberatus, Laniarius 48 liberiana, Bellamya 120 liberiensis heslopi, Hexaprotodon 226 liberiensis, Brachythemis 107 liberiensis, Hexaprotodon 20 Liberiictis 17 Libythea 186 LIBYTHEIDAE 186 licha, Dalatias 69 lichenifer, Gymnopholus 98 lichenigera, Oligosoma 61 Lichenostomus 132, 162 Lichmera 162, 199 Lichnanthe 250 lichtensteinii, Alcelaphus 130 lidthi, Garrulus 58 liemi, Taudactylus 67 lievreana, Westraltrachia 122 ligata, Leptoxis 118 lignaria, Paryphanta 216 Ligumia 172 lihue, Oliarus 251 lila, Achatinella 120 lilfordi, Podarcis 60 LILJEBORGIIDAE 90 lilliae, Lepidopyga 43 Lilliput, Pale 255 Lilliput, Purple 255 Lilliput, Savannah 255 lima, Fundulus 243 lima, Lithasia 118 LIMACIDAE 175, 215 limae, Picumnus 45 limatula, Nesopupa 216 limbata albissima, Cicindela 248 limbatus, Carcharhinus 69 limbatus, Rhantus 249 LIMNADIIDAE 92 Limnebius 249 LIMNEPHILIDAE 255 Limnephilus 255 Limnocythere 98 LIMNOCYTHERIDAE 98 Limnodromus 150 Limnogale 5 Limnornis 155 Limnotrochus 119 Limosa 150

Limpet, Australian Freshwater 113 Limpet, Eelgrass 187 LIMULIDAE 171, 209 Limulus 171 lindberghi, Akodon 23 Linderiella, California 169 Linderiella 169 LINDERIELLIDAE 91, 169 Lindog 74 lindog, Puntius 74 lindsayi, Actenoides 153 linearis, Macrancylus 185 lineata pinguicolla, Tympanocryptis lineata, Mogurnda 244 lineata, Paratherina 78 lineata, Rhyacophila 255 lineata, Stenopsychodes 255 lineatus, Acanthiops 60 lineifrons, Grallaricula 155 lineolata euzieriana, Macrogastra 239 lineolata, Ellipsaria 172 lineolata, Moitessieria 173 lineolatus, Hacrochlamys 124 lineolatus, Oxychilus 128 Linh-duong 22 linnellii, Sarotherodon 86 Linnet, Warsangli 56 linophora, Harmogenanina 190 Linsang, Leighton's 224 lintneri. Williamsonia 106 lintoni, Myiophobus 156 LINYPHIIDAE 88 Liobagrus 76 liocephalus, Calotes 59 Liocichla, Omei Shan 51 Liocichla 51 Liocypris 185 Liolaemus 60, 199 Liomys 142 Lion 16 Lion, Asiatic 223 Lion, Australian Sea 242 Lion, Galápagos Sea 224 Lion, Hooker's Sea 17 Lion, Steller's Sea 17 Liophis 61 Lioplax, Cylindrical 120 Lioplax 120 Lioptilus 159 liorus liorus, Chasmistes 246 liorus mictus, Chasmistes 246 Liosaccus 88 Liparia 71 liparozona, Marginella 213 Lipaugus 46 Lipochromis 85, 184 Lipotes 19 lira, Antrolana 97 lirata, Carelia 189 lirata, Leptoxis 118 lirata, Newcombia 121 liratus, Amphicyclotulus 117 Lirceus 97 Lissemys 200 Lissodelphis 195, 242 listeri, Lepidodactylus 59

lithaca, Branchinella 91 Lithasia 118 Lithoglyphus 188 lithognathus, Lithognatus 132 Lithognatus 132 Lithophane 253 Litocranius 131 litoralis, Nesopupa 216 Litoria 66, 166, 235, 243 Litthabitella 116 littoralis, Formicivora 46 littoralis, Lepidochrysops 103 littoralis, Urocyon 129 Littoraria 188 Littoridina 188 littorina, Hirthia 119 LITTORINIDIDAE 188 litus, Chaetodon 84 liventer, Butastur 148 livida, Achatinella 188 livida, Betta 88 lividus, Carunculina 255 lividus, Haplochromis 184 livingstonii, Pteropus 9 Liza 86 Lizard, Abbott's Crested 199 Lizard, Armadillo Girdled 59 Lizard, Beaded 59 Lizard, Black Legless 246 Lizard, Blunt-nosed Leopard 60 Lizard, Coachella Valley Fringe-toed60 Lizard, Filfola 246 Lizard, Giant Girdled 59 Lizard, Hierro Giant 60 Lizard, Iberian Rock 243 Lizard, Ibiza Wall 60 Lizard, Island Night 61 Lizard, Lang's Crag 165 Lizard, Lawrence's Girdled 165 Lizard, Lilford's Wall 60 Lizard, McLachlan's Girdled 59 Lizard, Namaqua Plated 165 Lizard, Panamint Alligator 59 Lizard, Sail-fin 199 Lizard, Saint Croix Ground 61 Lizard, San Diego Horned 246 Lizard, Southern Rock 243 Lizard, Soutpansberg Flat 165 Lizard, Soutpansberg Rock 165 Lizard, Spineless Forest 59 Lizard, Spiny Crag 165 Lizard, Striped Legless 60 Lizard, Tennent's Leaf-nosed 59 lizardensis, Theskelomensor 256 llaneae, Megalurulus 198 Loach, Balkan 203 Loach, Banded Mountain 132 Loach, Goldside 203 Loach, Italian 168 Loach, Romanian 203 Loach, Spotted 74 lobata, Campephaga 48 lobata, Tadarida 13 Lobaunia 116 lobipennis, Pseudopsectra 254 Lobo, Bagre 203 Loboparadisea 199

locardi, Moitessieria 116 lodderae, Beddomeia 114 Loddigesia 43 Lodero, Cachorrito 79 loewensteini, Lepidochrysops 103 Loggerhead 62 Logperch, Blotchside 84 Logperch, Conasauga 84 Logperch, Roanoke 84 lohbergeri, Sarotherodon 86 lomii, Typhlosaurus 61 Lonchaphylla 11 Lonchorhina 11, 137 Lonchura 57, 163 Longbill, Pulitzer's 51 Longclaw, Abyssinian 157 Longclaw, Grimwood's 157 Longclaw, Sharpe's 157 longianalis, Bedotia 204 longiantenna, Branchinecta 91 longicauda, Embernagra 162 longicaudata, Microgale 241 longicaudatus, Hapalomys 143 longicaudatus, Myosorex 7 longicaudatus, Notomys 178 longicaudatus, Spelaeornis 52 longicaudis longicaudis, Lutra 245 longicaudis, Gracilinanus 193 longicaudus bernardinus, Microtus 232 longicaudus coronarius, Microtus 232 longicaudus leucophaeus, Microtus 232 Longicorn, Cerambyx 98 Longicorn, Rosalia 98 longicornis, Otus 42 longidorsalis, Cyprinodon 183 longimembris bangsi, Perognathus 232 longimembris brevinasus, Perognathus 232 longimembris internationalis, Perognathus 232 longimembris pacificus, Perognathus 232 longimembris, Perognathus 23 longipennis, Neduba 109 longipes, Canthocamptus 96 longipes, Crocidura 6 longipes, Ingolfiella 90 longipes, Myotis 194 longipes, Nesosydne 251 longipes, Potorous 4 longipes, Stygobromus 89 longipes, Tupaia 8 longipes, Xenicus 181 longipinnis, Acheilognathus 71 longipinnis, Garra 72 longirostra, Rukia 161 longirostris, Dasyornis 50 longirostris, Eumeces 60 longirostris, Hippocampus 81 longirostris, Prognathochromis 184 longirostris, Stenella 129 longirostris, Turdoides 160 longispinis, Gambusia 80 longistyla, Congothemis 208 Longwing, Natterer's 104 loochoensis, Pteropus 177 lopesi, Megalobulimus 126

Lobster, Giant Tasmanian 95

lopezi, Hampala 72 **LOPHIIFORMES 78** Lophocebus 140, 222 Lophoictinia 33 Lophophorus 35 Lophopsittacus 181 Lophornis 43, 153 Lophotibis 147 Lophozosterops 161 Lophura 35, 149 Lophuromys 143, 197 lophurus, Pipistrellus 194 lorata, Achatinella 120 lorenzi, Phyllastrephus 157 lorenzmuelleri, Liolaemus 199 lorica, Litoria 66 loricata, Grallaricula 155 loricatus, Monarcha 159 Loriculus 41, 152 **LORIDAE 14, 139** Lorikeet, Blue 41 Lorikeet, Blue-fronted 40 Lorikeet, Duchess 152 Lorikeet, Henderson 42 Lorikeet, Iris 41 Lorikeet, Kuhl's 41 Lorikeet, Mindanao 41 Lorikeet, New Caledonian 40 Lorikeet, Palm 152 Lorikeet, Red-throated 40 Lorikeet, Striated 152 Lorikeet, Ultramarine 42 Loris, Pygmy 14 Loris, Slender 14 Loris 14 Lorius 41, 152 lornae lornae, Gulella 239 lornae major, Gulella 240 Lory, Black-winged 40 Lory, Blue-eared 152 Lory, Blue-streaked 152 Lory, Chattering 41 Lory, Purple-naped 41 Lory, Red-and-blue 40 Lory, White-naped 152 lotana, Lepidochrysops 103 Lottia 187 LOTTIDAE 187 Louisea 96 louisiadensis, Cracticus 199 louisianensis, Onychodiaptomus 207 Louse, Pygmy Hog Sucking 98 lovati, Dendromus 143 Lovebird, Black-cheeked 39 Lovebird, Fischer's 151 Lovenula 92 loveridgei, Nectarinia 161 lowei, Gerbillus 24 lowei, Sheppardia 52 loweii, Pseudocampylaea 190 loweryi, Xenoglaux 153 Loxia 199 Loxioides 56 Loxodonta 19 Loxops 56 loyaltiensis, Leucocharis 190

lubomirskii, Pipreola 156

Lucania 80 LUCANIDAE 99, 170, 249 luchti, Atrophaneura 105 Luchuena 215 luciae, Amazilia 43 luciae, Liza 86 luciae, Megalomys 178 luciana, Urothemis 209 lucidus, Hemignathus 56 lucidus, Polyergus 101 lucifer, Acerodon 177 lucifer, Hemisaga 109 Lucifuga 77 lucifugus alachua, Procambarus 237 lucifugus lucifugus, Procambarus 237 lucifugus, Stygobromus 185 lucina, Crocidura 6 Luciogobius 206 lucionensis, Tanygnathus 41 lucius, Ptychocheilus 73 luckmanii, Planilaoma 214 luconensis, Prioniturus 41 lucumontis, Leuciscus 167 ludia, Crocidura 6 ludlowi, Bhutanitis 105 ludoviciae, Turdus 53 ludovicianus arizonensis, Cynomys 230 ludwigi, Gulella 216 Luehdorfia, Chinese 208 Luehdorfia, Japanese 171 Luehdorfia 171, 208 lugens, Haplophaedia 153 lugens, Petinomys 142 lugubris, Formica 170 luhuana, Mandarina 214 luismanueli, Anoura 194 luizae, Asthenes 45 lukolelae, Malacomys 143 lullulae, Phalanger 241 lulua, Iolaus 103 lumachellus, Augastes 153 lumbee, Semotilus 203 lumholtzi, Dendrolagus 135 lumholtzi, Eodiaptomus 92 Luna, Cachorrito de Media 79 lunaris, Dirce 252 lunata, Onychogalea 177 lunatus jimela, Damaliscus 228 lunatus korrigum, Damaliscus 228 lunatus lunatus, Damaliscus 228 lunatus tiang, Damaliscus 228 lunatus topi, Damaliscus 228 lunatus, Damaliscus 130 lundbergi, Prietella 75 lunulatus, Garrulax 159 Lupine, San Francisco Tree 254 lupus, Canis 223 lupus, Canis 241 lupus, Ictalurus 203 luschani, Mertensiella 68 luscinia, Acrocephalus 49 Luscinia 51, 159 lusitanica, Chioglossa 68 lusitanica, Platyla 113 lusitanicum, Chondrostoma 71 lutaria, Brazieria 217

lutea, Partula 191 luteirostris, Zosterops 54 luteocephala, Sicalis 163 luteofusca, Cupedora 173 luteoschistaceus, Accipiter 148 luteovinctum, Etheostoma 169 luteoviridis, Pselliophorus 55 lutescens, Aloeides 102 luteus, Eolagurus 131 Lutilodix 125 LUTJANIDAE 84 Lutjanus 84 LUTODRILIDAE 172 Lutodrilus 172 lutosus, Polyborus 179 lutra lutra, Lutra 245 Lutra 17, 245 lutreola, Mustela 17 lutreolina, Mustela 17 lutzae, Liolaemus 199 lutzi, Thoropa 67 lutzii, Paratelmatobius 67 luxatus, Deltistes 75 luzonensis, Archboldomys 23 luzonensis, Mistichthys 132 luzonica, Anas 147 luzonica, Gallicolumba 151 lyalli, Xenicus 181 Lybius 154 Lycaeides 252 Lycaena 103, 170, 252 LYCAENIDAE 102, 170, 186, 208, 252 Lycaon 16 lycodus, Bulimulus 126 Lycosa 207 LYCOSIDAE 88, 207 lyelliana, Discula 124 LYGAEIDAE 251 lygdamus palosverdesensis, Glaucopsyche 252 Lygodactylus 59 Lygosoma 200 lylei, Hipposideros 136 lymani, Carelia 189 lymaniana, Pronesopupa 216 LYMNAEIDAE 113, 209 lymphatus, Neodiaptomus 92 lynchi, Branchinecta 91 lyncurium, Poecilmitis 103 lyndseyae, Poecilmitis 103 lynesi, Apalis 49 lynnae, Gomphurus 107 Lynx, Iberian 16 Lynx 16 lyonetianus, Gibbus 191 lyonnetianum, Craspedoma 133 Lyperobius 248 lyrata, Lyropupa 216 Lyrebird, Albert's 157 Lyrefin, Brasilia 79 Lyriothemis 107 Lyropupa 191, 216 lysithous harrisianus, Eurytides 253 Lythrurus 72 Lytta 249 niaaseni, Platyla 210 Macaca 15, 129, 140, 194, 245

lutea Diplommatina 210

macaca flavifrons, Eulemur 220 macaco macaco, Eulemur 220 macaca, Eulemur 13 Macaque, Assamese 15 Macaque, Barbary 15 Macaque, Booted 194 Macaque, Celebes Black 15 Macaque, Crab-eating 140 Macaque, Dumoga-bone 129 Macaque, Heck's 140, 245 Macaque, Japanese 15 Macaque, Lion-tailed 15 Macaque, Mentawai 15, 245 Macaque, Moor 15 Macaque, Muna-buton 15 Macaque, Muna-Butung 245 Macaque, Pig-tailed 15 Macaque, Rhesus 140 Macaque, Stumptail 15 Macaque, Taiwan 15 Macaque, Tibetan 129 Macaque, Tonkean 140 Macaque, Toque 140 Macaque, Yakushima 245 Macaw, Blue-throated 40 Macaw, Blue-winged 40 Macaw, Cuban Red 180 Macaw, Glaucous 180 Macaw, Hyacinth 40 Macaw, Lear's 40 Macaw, Military 40 Macaw, Red-fronted 40 Macaw, Spix's 40 macclintocki, Discus 214 maccoyii, Thunnus 88 Maccullochella 82, 236 macdonaldi, Totoaba 84 macdonaldii, Notopteris 9 macedonia, Alosa 71 macedonicus, Pachychilon 202 macedonicus, Rutilus 168 macelfreshi, Driloleirus 110 macgillivrayi, Pterodrama 30 macgregori, Cyclodina 60 Macgregoria 58 machadoi, Insulivitrina 175 machiki, Zoothera 161 MACHILIDAE 254 Machiloides 254 macinnesi, Rhinopoma 10 mackavi, Anomalopus 60 mackenziei, Stygabramus 89 Mackerel, Monterrey Spanish 88 maclareni, Clarias 76 maclareni, Pungu 86 maclaudi, Rhinolophus 137 macleari, Rattus 178 macleayi, Dorcopsulus 4 macleayi, Hedleya 119 macleayi, Pteronotus 11 macleayi, Sphaerospira 174 macmasterae, Phallodrilus 110 macmillani, Crocidura 6 macowi, Crocidura 6 Macquaria 206 macquariensis, Maccullochella 82 Macrancylus 185 Macrhybopsis

72, 168 Macroagelaius 163 Macrabaenetes 108 macrobullatus, Hipposideros 136 macrocephala, Acanthochelys 165 macrocephala, Percina 169 Macrocephalon 34 macrocerca, Hylonympha 43 macrocercus, Tateomys 27 Macroclemys 63 macrodactyla, Napothera 159 macrodactyla, Oceanodroma 30 macrodactylum croceum, Ambystoma macrodactylus, Myotis 138 Macroderma 10 macrodon, Onychogomphus 107 macradon, Sorex 136 Macrodontia 98 Macrogalidia 18 macrogaster, Yunnanilus 75 Macrogastra 239 macrognathus, Prognathochromis 184 Macrognathus 205 macralepidotus, Pogonichthys 73 macrolepidotus, Rutilus 74 macrolepis, Cyprinodon 79 macrolepis, Leiopotherapon 169 Macromia 106, 171 Macronectes 146 Macronous 159 Macronyx 157 Macroperipatus 109 macrophallus, Sonorella 174 Macropleurodus 85 macropoda, Caecidotea 97 MACROPODIDAE 4, 135, 177, 193, 219, 241 macrops, Breviceps 67 macraps, Nothamyrmecia 101 Macropsalis 153 macropterus, Vanellus 180 macropus, Globonautes 95 Macropus 135, 177, 220 Macropygia 151 macrorhyncha, Saxicola 52 macrorhynchus, Globicephala 129 MACROSCELIDEA 29, 245 Macroscelides 29 MACROSCELIDIDAE 29, 245 Macroscincus 182 Macrosphenus 51 macrostoma, Betta 88 macrostoma, Lampetra 201 macrostoma, Muticaria 174 macrostomus, Batrachophrynus 67 Macrotarsomys 24 macrotarsus, Myotis 138 Macrothele 207 macrotis, Idiurus 145 macrotis, Notomys 178 macrotis, Pipistrellus 139 Macrotis 4, 177 macrotus, Histiotus 138 Macrotus 11 macroura, Dendrortyx 149 macroura, Ratufa 22

macroura, Thripophaga 45 macrourus, Circus 148 MACROVELIIDAE 251 Macrovipera 62 macrura, Thermosphaeroma 97 macrura, Thylamys 135 Macruromys 24 macrurus, Elusor 62 macrurus, Mesembriomys 25 macularius ssp., Cyprinodon 247 maculata, Allotoca 80 maculata, Cotinga 46 maculata, Denisonia 62 maculata, Paroreomyza 56 maculatum, Etheostoma 169 maculatus gracilis, Dasyurus 219 maculatus maculatus, Dasyurus 219 maculatus, Callopistes 200 maculatus, Dasyurus 3 maculatus, Paretroplus 85 maculatus, Sandracottus 249 Maculinea 170, 252 maculipinna, Harpagochromis 184 maculosus, Caprimulgus 198 maculosus, Geomalacus 244 maculosus, Glossolepis 243 maculosus, Stallingsia 252 mada, Gymnophaps 151 mada, Prioniturus 152 madagascarensis, Melanatria 173 madagascariensis, Accipiter 148 madagascariensis, Acrontophis 61 madagascariensis, Astacoides 208 madagascariensis, Bedotia 204 madagascariensis, Daubentonia 14 madagascariensis, Erymnochelys 64 madagascariensis, Euxanthe 253 madagascariensis, Numenius 150 madagascariensis, Pantanodon 80 madagascariensis, Rousettus 10 madagascariensis, Sanzinia 61 madagascariensis, Tropodiaptomus 207 Madanga 53 madeira, Pterodrama 30 maderensis, Disculella 245 maderensis, Pipistrellus 13 madgascarensis, Typhleotris 87 madgei, Colparion 190 madgei, Gonospira 128 madgei, Nesopupa 127 Madoqua 21 madrensis, Peromyscus 26 madrensis, Spermophilus 142 Madtom, Caddo 75 Madtom, Carolina 203 Madtom, Frecklebelly 168 Madtom, Neosho 168 Madtom, Orangefin 75 Madtom, Ouachita 75 Madtom, Pygmy 75 Madtom, Scioto 75 Madtom, Smoky 75 Madtom, Yellowfin 75 madurae, Hipposideros 136 maeotica, Alosa 202 maesi, Garrulax 159 magambae, Cymothoe 253

magazinensis, Mesodon 215 magentae, Pterodroma 30 maghrebi, Gerbillus 24 Magicicada 170 magicus albiventris, Otus 245 magister, Neotoma 144 magna, Alectoris 149 magna, Sitta 53 magna, Sturnira 137 magnidentata, Cryptomastix 127 magnifica, Aegialia 249 magnifica, Planorbella 113 magnifica, Tulotoma 213 magnificus, Gorsachius 31 magnificus, Nodipecten 209 magnificus, Petaurista 142 magou, Euploea 104 Magou, the 104 Magpie, Black 164 Magpie, Short-tailed 164 Magpie, Sri Lanka 58 Magpie, White-winged 164 Magpie, Yellow-breasted 164 Magpie-robin, Seychelles 50 mahaganus, Pteropus 9 maidae, Euasiacus 96 maillardi, Circus 148 Mainty, Trondo 86 maituatensis, Orangia 123 Maizania 238 major, Ameiva 182 major, Beamys 143 major, Brachypteryx 158 major, Bradypterus 50 major, Gryllotalpa 209 major, Hirasea 214 major, Macruromys 24 major, Nycteris 10 major, Phyllonycteris 177 major, Spermophilus 142 major, Zoothera 53 majori, Eliurus 24 majusculus, Pseudomugil 243 makawai, Pogoniulus 44 makirensis, Phylloscopus 160 Mala 220 malabarica, Idea 171 malacense, Polyplectron 35 malachitacea, Triclaria 41 Malaclemys 166 Malacochersus 65 Malacocincla 51 Malacolimax 175 Malacomys 143, 242 Malaconotus 48, 49, 157 Malacopteron 51, 159 malacoptilus, Rimator 160 malacorhynchus, Hymenolaimus 32 malagrida cedrusmontana, Argyrocupha 252 malagrida malagrida, Argyrocupha malagrida maryae, Argyrocupha 252 malagrida paarlensis, Argyrocupha 252 malaitae, Rhipidura 52

malaitensis, Nyctimene 9

Malamída 74 malapana, Euthalia 253 malayana, Crocidura 6 malayanus, Anthracoceros 154 malayanus, Helarctos 195 malayanus, Suncus 193 maldonadoi, Bullockia 204 Maleo 34 maleo, Macrocephalon 34 maletae, Orconectes 94 Malimbe, Gola 57 Malimbe, Ibadan 57 Malimbus 57 Malkoha, Red-faced 42 mallacoota, Engaeus 95 malleata, Auriculella 213 mallee, Stipiturus 132 Malleefowl 34 Mallomys 24, 143 Malpulutta 132 maluroides, Spartonoica 155 Malurus 159, 198 MAMMALIA 3, 129, 135, 177, 193, 219, 241, 245 mammillifurca, Canthocamptus 96 Mamo, Black 181 Mamo, Hawaii 181 mana, Oreomystis 56 Manakin, Black-capped 47 Manakin, Golden-crowned 47 Manakin, Opal-crowned 156 Manakin, Yellow-headed 156 Manalak 74 manalak, Puntius 74 manasa, Neptis 253 Manatee, African 19 Manatee, Amazonian 19 Manatee, Antillean 225 Manatee, Caribbean 19 Manatee, Florida 225 manatus latirostris, Trichechus 225 manatus manatus, Trichechus 225 manatus, Trichechus 19 mandarina, Mandarina 214 Mandarina 214 mandellii, Arborophila 34 mandersi, Cyclyrius 252 Mandibularca 72 mandibularis, Dionda 72 mandibularis, Prognathochromis 184 Mandrill 140 Mandrillus 15, 140, 222 Manduca 254 manengubae, Crocidura 241 Mangabey, Black 140, 245 Mangabey, Collared 245 Mangabey, Crested 140 Mangabey, Golden-bellied 222 Mangabey, Opdenbosch's Black 222 Mangabey, Red-capped 140 Mangabey, Sanje 222 Mangabey, Sooty 140 Mangabey, Tana River 222 Mangabey, White-collared 222 manglae, Batrachoides 78 mangoura, Papilio 105 mangshanensis, Trimeresurus 62 manguaoensis, Puntius 74

Manica 100 MANIDAE 142 maniensis. Perdicella 188 manillae, Penelopides 154 manipurensis, Perdicula 35 Manis 142 manlius, Papilio 171 manoeli, Neritilia 173 manoeli, Neritina 209 Manorina 54 manoro, Smerina 253 Manouria 65 mansfieldi, Bhutanitis 208 mansuetus, Sylvilagus 146 mantchuricum, Crossoptilon 34 Mantella 67 mantelli, Porphyrio 36 MANTIDAE 171 MANTODEA 171 manul ferrugineous, Otocolobus 223 manul, Otocolobus 241 Manul, Red 223 manusi, Tyto 42 Mao 54 Maoricicada 251 Mapleleaf, Winged 112 maquassiensis, Crocidura 241 maracaibensis, Notodiaptomus 92 maracana, Ara 40 maraena, Prototroctes 76 maraho, Papilio 171 Marakely 244 marambaiae, Leptodactylus 201 maranonica, Melanopareia 155 maraxina, Monodelphis 3 marcanoi, Solenodon 177 marcellinus, Eurytides 105 marchandi, Orconectes 94 marchantii, Powelliphanta 175 marchei, Cleptornis 53 marchei, Mydaus 17 marchei, Ptilinopus 39 marchi, Algyroides 60 marcia, Parantica 104 marcidum, Cupedora 173 marecula, Anas 179 maresi, Theodoxus 209 margaretae, Zoothera 161 Margaretamys 24 margarethae, Charmosyna 152 margarettae, Haeromys 24 margarita scheffeli, Felis 223 margarita, Felis 241 margarita, Macromia 171 margarita, Somatochlora 106 margaritacea, Alaena 102 margaritacea, Palaua 215 margaritae, Conirostrum 163 margaritae, Dipodomys 23 margaritae, Lethe 253 margaritifera durrovensis, Margaritifera 238 margaritifera, Margaritifera 110 Margaritifera 110, 238, 255 MARGARITIFERIDAE 110, 238, 255 Margaronia 253 Margaronia 253

Margaronian, Blue 253 Margaronian, Green 253 Margarornis 155 Margay 241 marginata, Phrantela 256 marginata, Alasmidonta 209 marginata, Caperea 242 marginata, Cicindela 248 marginata, Kuhlia 244 marginata, Testudo 243 marginatus, Ateles 14 marginatus, Epinephelus 168 Marginella 213 MARGINELLIDAE 213 marginipennis, Cicindela 169 Maria, Sardinita de Santa 72 mariae. Etheostoma 206 mariae, Eudontomyzon 201 mariae, Helicella 126 mariae, Nesillas 159 mariae, Stomatepia 86 marialiciae, Eulonchus 250 marianae, Craterocephalus 204 mariangelae, Muricopsis 213 mariannae, Hydroporus 248 mariannarum, Ladronellum 214 mariannarum, Taheitia 212 mariannus, Cervus 197 mariannus, Pteropus 9 marica, Gracilinanus 135 mariei, Cyclosurus 187 marieps, Charaxes 253 marinkellei, Lonchorhina 11 marinum, Stizostedion 206 marinus, Aplochiton 204 marisae, Hipposideros 10 maritimus, Ursus 129 markhami, Oceanodroma 198 Markhor 21 Markhor, Flare-horned 228 Markhor, Straight-horned 228 Markhor, Tadjik 228 marleyi, Chaetodon 84 Marmaronetta 32 marmorata, Napothera 159 marmorata, Catocala 253 marmorata, Clemmys 64 marmorata, Pardofelis 195 marmorata, Uperoleia 182 marmoratus, Brachyramphus 150 marmoratus, Cynolebias 79 marmoratus, Oryzias 80 marmoratus, Rivulus 243 marmoratus, Salmo 204 marmorensis, Discus 123 Marmosa 3, 135, 193 Marmoset, Aripuana 241 Marmoset, Black-headed 14 Marmoset, Buffy-headed 14 Marmoset, Buffy-tufted-ear 14 Marmoset, Geoffroy's Tufted-ear 14 Marmoset, Goeldi's 14 Marmoset, Golden-white Tassel-ear14 Marmoset, Wied's 241 Marmosops 3, 135 Marmot, Glacier Bay Hoary 230 Marmot, Menzbier's 22

Marmot, Montague Island Hoary 230 Marmot, Vancouver Island 22 Marmota 22, 131, 142, 230 maroni, Papilio 208 marquesana, Taipidon 190 marrianae, Margaritifera 110 marrocana, Cobitis 203 Marron 95 marroni carolus, Huleechius 249 marshalli, Meridolum 173 marshalli, Pleurobema 112 marshianus, Aglaodiaptomus 91 Marstonia, Armored 211 Marstonia, Beaver Pond 211 Marstonia, Ocmulgee 211 Marstonia, Olive 211 Marstonia, Royal 256 marsupialis, Antidorcas 130 marsupiobesa, Elliptio 255 Martelia 119 Marten, Javan Yellow-throated 224 Marten, Nilgiri 17 Marten, Tsushima Island 224 martensi, Castalia 110 martensi, Trichotoxon 215 martensiana, Partula 127 martensii, Padogobius 169 martenstyni, Puntius 74 Martes 17, 224 martiensseni, Otomops 13 martigener, Engaeus 95 Martin, Sinaloa 198 martinensis, Neotoma 25 martini, Astatotilapia 184 martinicensis, Incerticyclus 188 martinii, Euploea 171 martiniquensis, Myotis 138 masafuerae, Aphrastura 45 masalai, Nyctimene 9 mascaensis, Hemicycla 174 mascaensis, Insulivitrina 175 mascarinus, Mascarinus 181 Mascarinus 181 Masked-owl, Bismarck 42 Masked-owl, Lesser 198 Masked-owl, Manus 42 Masked-owl, Minahassa 198 Masked-owl, Taliabu 42 masoni, Fusconaia 111 massochusettsensis, Epischura 207 MASTACEMBELIDAE 205 mastersi marakupa, Hesperilla 252 Masticophis 246 Mastigodiaptomus 92, 207 Mastomys 24, 144 matacus, Tolypeutes 136 matafaoi, Diastole 190 matanensis, Glossogobius 87 matanensis, Oryzias 80 matanim, Phalanger 4 mathewsi, Penescosta 123 Mathewsoconcha 125 matildae, Muricopsis 213 Matrona 237 matschiei, Dendrolagus 4 matschiei, Galago 139

mattheyi, Mus 197 matthiae, Rhipidura 199 mattogrossensis, Molossops 139 maturna, Hypodryas 208 mauleanum, Cauque 168 maupiensis, Mautodontha 189 maura, Macaca 15 maureenae, Gymnochthebius 249 maureenae, Hydraena 249 Mauremys 200, 243 mauriciana, Platycnemis 108 mauritaniae, Gerbillus 24 mauritiana, Leiolopisma 182 mauritianus, Alopochen 179 mauritianus, Gyraulus 113 mauritianus, Lophopsittacus 181 mauritianus, Nycticorax 179 maurus, Circus 148 maurus, Eumops 13 Mautodontha 123, 189, 190 mavornata, Aplonis 182 mawii, Dermatemys 63 maxi, Sundamys 27 maxillaris, Lipochromis 85 maxillosus, Saltator 163 maxima, Paracrocidura 241 maxima, Tridacna 133 maximiliani, Hydromedusa 62 maximiliani, Oryzoborus 162 maximus, Aepyornis 179 maximus, Cetorhinus 69 maximus, Elephas 19 maximus, Lachnolaimus 87 maximus, Priodontes 5 Maxomys 24, 144 maxwellii, Cephalophus 141 maya, Cyprinodon 79 mayensis, Peromyscus 26 mayeri, Astrapia 58 mayeri, Columba 38 Mayermys 24 Mayfly, American Sand-burrowing 250 Mayfly, Argo 250 Mayfly, Berner's Two-winged 250 Mayfly, Blackwater Sand-filtering250 Mayfly, Cahaba Sand-filtering 250 Mayfly, Colorado Burrowing 250 Mayfly, Diverse 250 Mayfly, False 250 Mayfly, Frison's 250 Mayfly, Large Blue Lake 99 Mayfly, Meridion Blackwater 250 Mayfly, Pecatonica River 186 Mayfly, Robust Burrowing 186 Mayfly, Spicluose 250 Mayfly, West Virginia Burrowing 250 Mayfly, Yellow 250 maylandi, Melanotaenia 243 maynardi, Procyon 17 mayori, Mus 144 mayottensis, Gulella 191 mayri, Rallina 198 mayri, Rhoptromyrmex 101 Mayrornis 51, 159 mazama yelmensis, Thomomys 231 mazama couchi, Thomomys 231 mazama glacialis, Thomomys 231

matsudairae, Oceanodroma 198

mazama louiei, Thomomys 231 mazama pugetensis, Thomomys 231 mazama tacomensis, Thomomys 231 mazama tumuli, Thomomys 231 Mazama 141, 197 mazumbaiensis, Sitala 215 mbaiso, Dendrolagus 4 mccordi, Alasmidonta 110 mccordi, Chelodina 62 mccordi, Cuora 200 mccubbini Taskiria 254 mcglameriae, Medionidus 111 mcgregori, Coracina 48 mcilhennyi, Conioptilon 156 mckenziei, Pipistrellus 13 mclachlani, Cordylus 59 mcleodii, Nyctiphrynus 153 mcmichaeli, Elliptio 172 mcneili, Ferrissia 113 meadewaldoi, Haematopus 180 Meadowlark, Pampas 56 meandricus, Acanthorutilus 202 mearnsi, Pteropus 194 Mecistogaster 108 Mecodema 185 MECOPTERA 254 Meda 72 medeis, Conomyrma 100 media, Gallinago 150 media, Kyidris 100 medianalis, Pseudobargus 76 medicaudatus, Lophuromys 143 medicinalis, Hirudo 171 medicus, Agapetus 254 Medionidus 111, 172 medirostris, Acipenser 70 Mediterraneo, Barbo 71 meeki brevis, Orconectes 237 meeki, Corvus 164 meeki, Cyprinodon 79 meeki, Graphium 105 meeki, Macrhybopsis 168 meeki, Microgoura 180 meeki, Zosterops 199 megacephalum, Platysternon 200 megacephalus atrirelictus, Microdipodops 232 megacephalus nexus, Microdipodops megacephalus, Nycticorax 179 megaceros, Kobus 141 MEGACHILIDAE 208 Megacolabus 248 Megacrex 198 Megadendromus 24 MEGADERMATIDAE 10, 136 Megadontomys 144 Megadyptes 29 Megadytes 185 megaensis, Hirundo 48 megaera, Graphium 105 Megaerops 9 MEGALADAPIDAE 14, 241 Megalagrion 106, 171, 187, 237 Megalaima 154 Megalanura 250

Megalaperyx 179

MEGALOBULIMIDAE 126, 190 Megalobulimus 126 megalocephala, Natrix 61 Megalolulimus 190 Megalomyrmex 100 Megalomys 178 MEGALONYCHIDAE 193 megalophylla, Scotarythra 186 megalops, Astatotilapia 184 megalotis limicola, Reithrodontomys megalatis ssp., Lepomis 247 megalotis, Dorcatragus 21 megalotis, Paracoelops 10 megalura, Dactylopsila 5 Megalurulus 159, 198 Megalurus 51 MEGAPODAGRIONIDAE 107 MEGAPODIIDAE 34, 149 Megapodius 34, 149 Megaptera 18 megarhyncha, Pitta 156 megarhynchus, Ploceus 57 megarramphus, Dermagenys 168 MEGASCOLECIDAE 109 Megascolides 110 megaspila, Cobitis 203 MEGATHYMIDAE 252 Megatriorchis 148 Megaxenops 45 Megazosterops 161 megomphala, Opanara 123 MEGOMPHICIDAE 126 Megupsilon 183 mehelyi, Rhinolophus 11 meidingeri, Rutilus 74 meinertzhageni ivoriensis, Hylochoerus 226 mekistocholas, Notropis 73 mekisturus, Peromyscus 26 Meladema 98 melaena griqua, Tuxentius 252 Melaenornis 51 melampoides, Amphorella 124 Melamprosops 56 melampus petersi, Aepyceros 227 melampus tsuensis, Martes 224 melampus, Aepyceros 130 Melanatria 173 Melanerpes 155 melanippus keteus, Danaus 237 melanjae, Cymothoe 253 Melanobatrachus 67 nielanobranchus, Papillogobius 169 melanocephalus, Cacajao 241 melanocephalus, Carpornis 46 melanocephalus, Speirops 53 melanocephalus, Threskiornis 147 melanocephalus, Tragopan 35 Melanocharis 199 Melanochelys 64, 200 melanochlamys, Bangsia 54 melanochroa, Ducula 151 melanochrous. Serinus 163 melanodera, Melanodera 162 Melanodera 162 melanogaster, Anhinga 147

melanogaster, Sporophila 163 melanogaster, Turnix 35 Melanogrammus 77 melanoides, Chilonopsis 191 melanoidus, Leptoxis 118 melanoleuca, Ailuropoda 17 melanoleucus, Microhierax 149 melanoleucus, Spizastur 148 melanomycter, Saccogaster 77 melanonota, Touit 41 melanonotus, Odontophorus 149 melananyx, Lophuromys 143 Melanopareia 155 Melanoperdix 149 melanops, Percichthys 206 melanops, Scolomys 27 melanaps, Sparophila 55 melanops, Vimba 74 **MELANOPSIDAE 212** melanopterus complex, Lipochromis 85 melanopterus, Aeretes 142 melanopterus, Balantiocheilos 71 melanopterus, Sturnus 164 Melanoptila 158 melanosoma, Eleotris 169 Melanospiza 162 melanostictus, Phyllodactylus 199 melanostomus, Neogobius 206 melanostomus, Notropis 73 Melanosuchus 58 melanota, Palaemnema 108 Melanotaenia 78, 168, 204, 205, 243 melanotis, Coryphaspiza 54 melanotis, Manorina 54 melanotis, Oryzomys 197 melanotis, Raphicerus 131 melanura, Dendrogale 8 melanurus, Carpomys 197 melanurus, Ceyx 44 melanurus, Eliomys 145 melanurus, Myrmoborus 46 melanurus, Mysateles 146 melanurus, Peromyscus 26 melanurus, Pithecheir 144 melas, Globicephala 242 Melasmothrix 24 meleagrides, Agelastes 34 Melidectes, Long-bearded 54 Melidectes, Vogelkop 162 Melidectes 54, 162 Melignomon 44 melindae, Anthus 157 Meliobba 173 Meliphaga 162, 199 MELIPHAGIDAE 54, 132, 162, 181, 199 melissa samuelis, Lycaeides 252 melissa, Vampyressa 137 melitensis, Lampedusa 123 melitensis, Pseudamnicola 211 melitophrys, Virealanius 163 melleri, Anas 147 mellianus, Oriolus 57 mellis, Pseudomugil 78 Mellisuga 153 melodus, Charadrius 37 Melogale 17, 224 MELOIDAE 249

Melomys, White-toothed 23 Melomys 25, 144 melanes, Banksula 88 Melonycteris 9 Melursus 18 melvillensis, Trochomorpha 175 melvilli, Marginella 213 menachensis, Turdus 53 menadensis, Parantica 244 menae, Orconectes 94 menagei, Gallicalumba 39 menava maeroides, Pararge 253 menckei, Monarcha 199 mendana, Graphium 171 mendiculus, Spheniscus 29 mendozae, Pomarea 52 Menidia 78, 168 mento, Prognathochromis 85 mento, Silurus 76 Menura 157 MENURIDAE 157 menzbieri, Marmota 22 mephistophiles, Pudu 141 merces, Aloeides 102 mercierii, Ptilinopus 180 mercuriale, Coenagrion 106 Merganser, Auckland Islands 179 Merganser, Brazilian 32 Merganser, Scaly-sided 32 mergulus, Limnogale 5 Mergus 32, 179 meridianus, Serranochromis 132 meridionalis, Cobitis 168 meridionalis, Mysateles 146 meridionalis, Nestor 41 meridionalis, Ornithoptera 105 meridionalis, Pseudirion 250 Meridolum 122, 173 Meriones 25 merlini, Arborophila 34 MEROSTOMATA 171, 209 merriami collinus, Dipodomys 231 merriami parvus, Dipodomys 231 merriami, Empetrichthys 184 merriami, Fluminicola 211 merrilli, Ptilinapus 151 mertensi, Suncus 8 Mertensiella 68, 167 meruensis, Aeshna 105 Merulaxis 46, 155 merulinus, Garrulax 159 Merycomyia 250 Mesacanthotelson 247 Mesechinus 6 Mesembriomys 25, 144 mesibovi, Beddomeia 114 Mesite, Brown 35 Mesite, Subdesert 35 Mesite, White-breasted 35 Mesitornis 35 **MESITORNITHIDAE 35** Mesocapromys 28 Mesocricetus 25 Mesocyclops 92 Mesodon, Banded 239 Mesodon 175, 215, 239 Mesodantrachia 174

MESOGASTROPODA 113, 133, 173, 187, 210, 238, 244, 256 Mesogobius 206 mesoleuca, Conothraupis 54 mesoleucus telmalestes, Conepatus 224 Mesomys 197 Mesonerilla 110 Mesoperipatus 209 Mesoplodon 196 mesotes, Paragalaxias 77 MESOVELIIDAE 251 Meta 88 Metabolus 51 Metacnemis 209 Metacyclops 92, 132 Metadiaptomus 92 Metallura 43, 153 Metalmark, Lange's 253 Metaltail, Neblina 153 Metaltail, Perijá 153 Metaltail, Violet-throated 43 metamorpha, Ogasawarana 112 Metapogon 250 metastriata, Dysnomia 255 metastriata, Epioblasma 110 Metatrichoniscoides 97 metcalfi, Pyrgulopsis 211 metcalfi, Sonorella 174 methueni, Lygodactylus 59 methymna dicksoni, Lepidochrysops 252 Metisella 252 metohiensis, Paraphoxinus 73 Metrarga 251 Metrioptera 109 Mexclapique 80 mexicana, Branchinecta 91 mexicana, Choeronycteris 137 mexicana, Dasyprocta 145 mexicanum, Ambystoma 68 mexicanus jordani, Astyanax 236 mexicanus navaho, Microtus 245 mexicanus, Cynomys 22 mexicanus. Ictalurus 75 mexicanus, Microtus 25 mexicanus, Rheomys 145 mexicanus, Xenotriccus 156 Mexico, Charal del Valle de 204 Mexilana 97 Mexipyrgus 238 Mexistenasellus 97 Mexithauma 256 meyerdeschauenseei, Tangara 55 meyeri, Pachycephala 160 meyeri, Xiphophorus 80 meyricki, Hedylepta 186 Mezquital, Cachorrito de 79 miamiensis, Cyclocephala 250 mica, Cincinnatia 115 micanopy, Belocephalus 109 micans, Amastra 121 michaeli, Arctodiaptomus 91 michaeli, Harpagochromis 184 michaudi, Lemniscia 125 michaudi, Trapidaphora 212 miconax, Aotus 14 Micaureus 135 micramyla, Palline 214

Micrarionta 125, 215 Microstur 34, 242 micristius, Cyprinus 72 Microbatrachella 67 MICROBIOTHERIA 3 MICROBIOTHERIIDAE 3 microblepharis, Celestus 199 Microcebus 13 microcephalus, Barbus 71 micrococcus, Pyrgulopsis 211 Microcryptorhynchus 248 Microcylloepus 249 Micradillus 144 Microdipodops 232 microdon, Lepilemur 241 microdon, Lipochromis 184 microdon, Nyctophilus 13 micradon, Pristis 69 microdon, Reithrodontomys 145 Microeca 159 Microgale 5, 241 Microgoura 180 microgyna, Pheidole 101 microgyna, Tetramorium 102 Microhierax 149 Microhydromys 144 Microhylid, Black 67 MICROHYLIDAE 67, 201 microlepidotus, Basilichthys 204 microlepidotus, Phyllodactylus 165 microlepis, Leuciscus 72 microlepis, Mycteroperca 83 microlepis, Oligosoma 61 microlepis, Tachygia 182 Micromacronus 51 micromegas, Nesoctites 155 Micromonacha 154 micromphala, Kimboraga 122 Micromys 144 Micronaspis 249 Micronycteris 11, 137 Microperaryctes 193 Microphis 205 microphthalmus, Sinocyclocheilus 74 microphthalmus, Spalax 27 microphylla, Tritocleis 186 micropithecus, Sphaerodoctylus 59 Micropotamogale 5 microps alfredi, Dipodomys 231 microps leucotis, Dipodomys 232 microps, Catostomus 75 microps, Heteropneustes 76 Micropsitta 152 Micropteropus 9 micropterus, Chlamydogobius 87 Micropterus 169, 206, 247 Micropygia 149 microsculpta, Thapsia 215 micraspira, Platyla 210 microstoma, Lamellidea 213 microstoma, Partula 191 microstriata, Physella 113 Microstrophia 128 microtarsus, Gracilinanus 135 microthauma, Lyropupa 216 microtheca, Ogasawarana 209 microtis, Dusicyon 195

Microtus 25, 144, 178, 197, 232, 233, 242, 245 micrus, Nesophontes 177 MICTACEA 97 MICTOCARIDIDAE 97 Mictocaris 97 middlekaufi, Idiostatus 109 Midge, Giant Torrent 99 Midge, Tasmanian Torrent 99 midgleyi, Pingalla 169 mighelsiana, Partulina 121 migratorius, Cricetulus 143 migratorius, Ectopistes 180 migueli, Eupsophus 67 mikado, Syrmaticus 149 mikadoi, Acipenser 70 MILACIDAE 215 milagros, Parantica 104 milensis, Podarcis 60 militaris, Ara 40 militaris, Sturnella 56 Millardia 25 millepalmarum, Eremarionta 125 millepunctata, Damochlora 122 millerae, Victodrobia 117 Millerbird 49 milleri, Cochliopina 115 milleri, Grallaria 46 milleri, Knipowitschia 206 milleri, Myotis 177 milleri, Procambarus 95 milleri, Sorex 7 milleri, Thermosphaeroma 97 millestriata, Dupucharopa 123 milleti, Garrulax 50 milnei, Garrulax 159 Miloderes 248 miltus, Cambarus 93 milvus, Milvus 242 Milvus 242 Milyeringa 206 mimeticus, Dryotribus 185 Mimic, White 252 MIMIDAE 49, 158 Mimizuku 42 Mimodes 49 mimosa, Discocharopa 214 mimula, Belgrandiella 115 mimulus, Pseudantechinus 3 minahassae, Pipistrellus 194 minckleyi, Cichlasoma 85 minckleyi, Nymphophilus 256 mindana nipponica, Hemicordulia 238 mindanensis, Coracina 48 mindanensis, Ptilocichla 160 mindorensis, Anonymomys 23 mindorensis, Bubalus 20 mindorensis, Crocodylus 58 mindorensis, Ducula 39 mindorensis, Otus 42 mindorensis, Penelopides 44 mindorensis, Rattus 26 mindorus, Crocidura 6 Miner, Black-eared 54 minima, Batis 198 minima, Beddomeia 114 minima, Lampetra 183

minima, Paludinella 211 minima, Stormsia 119 minimus atristriatus, Tamias 231 minimus maritimus, Antechinus 219 minimus selkirki, Tamias 231 minimus, Chironectes 135 minimus, Cynolebias 79 minimus, Spilornis 148 miniopinna, Betta 88 Miniopterus 12, 138 Minivet, Brown-rumped 157 Minivet, White-bellied 157 Mink, European 17 minnae, Grammomys 143 Minnow, Black-striped 168 Minnow, Devil's River 72 Minnow, Kanawha 73 Minnow, Loach 74 Minnow, Maluti 73 Minnow, Rio Grande 72 Minnow, Roundnose 246 Minnow, Stumptooth 183 Minnow, Swamp 203 Minnow, Western Mud 168 Minnow-Nase 202 minor, Dobsonia 136 minor, Elapognathus 165 minor, Eliurus 242 minor, Furcifer 59 minor, Lacustrelix 173 minor, Leptoxis 118 minor, Miniopterus 138 minor, Myrmotherula 46 minor, Nothura 29 minor, Palaua 215 minor, Phoenicopterus 147 minor, Platalea 31 minor, Platanista 19 minor, Praomys 26 minor, Procyon 17 minotaur, Hippocampus 205 minous, Acomys 23 minuchae, Rossomyrmex 101 minuscula, Brazieria 217 minuta, Crocidura 193 minuta, Hauffenia 211 minuta, Helicoverpa 186 minuta. Kerivoula 138 minuta, Libellulosoma 106 minuta, Nanocopia 92 minuta, Neohoratia 211 minuta, Syrnolopsis 119 minuta, Trochidrobia 117 minutilla, Rhageessa 139 minutissima, Helenoconcha 189 minutissima, Hemistoma 116 minutissimus, Leptothorax 100 minutus, Lacconectus 249 minutus, Micromys 144 minutus, Mormopterus 13 minutus, Nyctimene 9 minutus, Paraphoxinus 202 minutus, Strongylognathus 102 Mipentina, Damba 85 mira, Rhogeessa 139 mira, Scolopax 38

mirabilis, Carelia 189 mirabilis, Cyanolyca 58 mirabilis, Eriocnemis 43 mirabilis, Hemiphlebia 107 mirabilis, Hirasea 214 mirabilis, Loddigesia 43 mirabilis, Lyropupa 216 mirabilis, Partula 191 Mirafra 48, 157 Miramella 108 miranda, Basilornis 164 mirandae, Hemitriccus 47 Miratesta 187 MIRIDAE 251 mirifica, Lytta 249 mirificus, Lewinia 36 mirus, Mesoplodon 196 mirus, Otus 42 Mirza 13 misella, Lamprocystis 215 Misgurnis 168 misoolensis, Melanotaenia 243 MISOPHRIIDAE 97 MISOPHRIOIDA 97 mississippiensis, Orconectes 94 missouri, Glyphopsyche 255 Mistfrog, Common 66 Mistichthys 132 mitchellae, Thersites 122 mitchelli mitchelli, Neonympha 253 mitchelli, Quincuncina 112 mitchellii, Phegornis 150 mitis elgonis, Cercopithecus 222 mitis kandti, Cercopithecus 222 Mitoura 252 mitra, Euploea 104 mitratus, Rhinolophus 194 mittendorfi, Lemniscomys 24 mitu, Mitu 180 Mitu 180 Mixogaster 250 Mixophyes 67, 167 mixtus. Batrachostomus 198 mixtus, Saccolaimus 10 miya, Crocidura 6 miyazakii, Chamalychaeus 213 mizura, Euroscaptor 8 mlokasiewiczi, Tetrao 149 Moa, Brawny Great 179 Moa, Burly Lesser 179 Moapa 73 Moccasinshell, Alabama 111 Moccasinshell, Coosa 111 MOCHOKIDAE 76, 243 mocinno, Pharomachrus 153 Mockingbird, Floreana 49 Mockingbird, Socorro 49 modesta, Gerygone 50 modesta, Gila 72 modesta, Hemicycla 245 modesta, Microstrophia 128 modesta, Turacoena 39 modestus, Dicrurus 164 modestus, Gallirallus 180 modestus, Gomphurus 171 modestus, Zosterops 54 modica, Gibberula 213

mirabilis, Campsicnemus 185

moellendorffi, Sundasciurus 142 moerneri, Papilio 105 moesta, Amaurospiza 162 moesta, Lytta 249 Mogera 8 mogollonensis hualpaiensis, Microtus Mogurnda, Black 87 Mogurnda, Blotched 87 Mogurnda, Eastern 244 Mogurnda, Kokoda 244 Mogurnda, Striped 87 Mogurnda, Variegated 87 Mogurnda 87, 244, 247 mohaveana, Helminthoglypta 174 mohavensis, Spermophilus 22 Moho 54, 181 Mohoua 51 Moitessieria 244 Moitessieria 116, 173, 244 Mojarra 85 mojavensis mojavensis, Crossidius 248 molae, Pyrenaearia 126 Mole, De Winton's Golden 5 Mole, Duthie's Golden 5 Mole, Giant Golden 5 Mole, Grant's Golden 5 Mole, Gunning's Golden 5 Mole, Japanese Mountain 8 Mole, Juliana's Golden 5 Mole, Northern Marsupial 4 Mole, Persian 8 Mole, Rough-haired Golden 5 Mole, Rynkyn 8 Mole, Sado 8 Mole, Sclater's Golden 5 Mole, Somali Golden 5 Mole, Southern Marsupial 4 Mole, Van Zyl's Golden 5 Mole, Visagie's Golden 5 Mole, Yeilow Golden 241 Mole, Zulu Golden 241 molesta, Lytta 249 molinae, Trochoidea 126 mollicomulus, Rattus 26 mollispinis ssp., Lepidomeda 246 moloch, Hylobates 16 molokaiensis, Pronesopupa 216 MOLOSSIDAE 13, 139, 194 molossinus, Pteropus 9 Molossops 13, 139 Molossus 139 moluccensis, Cacatua 40 molurus, Python 165 momonga, Pteromys 242 MOMOTIDAE 154 monacha, Cyprinella 167 monacha, Grus 131 monacha, Poeciliopsis 205 monacha, Ptilinopus 151 monachus milleri, Pithecia 222 monachus, Aegypius 148 monachus, Monachus 17 Monachus 17, 178 Monadenia 121, 215, 239 monae, Typhlatya 93 Monal, Chinese 35 Monal, Sclater's 35

Monarch, Biak 51 Monarch, Black-bibbed 159 Monarch, Black-chinned 51 Monarch, Black-tipped 159 Monarch, Celestial 50 Monarch, Fatuhiva 52 Monarch, Flores 51 Monarch, lphis 52 Monarch, Jamaican 170 Monarch, Kolombangara 159 Monarch, Loetoe 159 Monarch, Manus 159 Monarch, Marquesan 52 Monarch, Ogea 51 Monarch, Rarotonga 52 Monarch, Short-crested 159 Monarch, Tahiti 52 Monarch, Tinian 51 Monarch, Truk 51 Monarch, Vanikoro 159 Monarch, White-breasted 199 Monarch, White-tailed 159 Monarch, White-tipped 51 Monarch, Yap 159 Monarcha 51, 159, 199 monardi, Bellamya 120 Monardithemis 107 monas, Aphaostracon 114 monasa, Porzana 180 monax, Crocidura 6 monensis granti, Epicrates 234 monensis monensis, Epicrates 234 monensis, Typhlops 62 Mongo 86 mongo, Stomatepia 86 Mongoose, Broad-striped 16 Mongoose, Brown-tailed 17 Mongoose, Gambian 195 Mongoose, Giant-striped 17 Mongoose, Jackson's 16 Mongoose, Liberian 17 Mongoose, Narrow-striped 17 Mongoose, Sokoke Bushy-tailed 224 mongoz, Eulemur 13 monguilloti, Carduelis 163 Monias 35 monica, Artemia 132 moniliger, Batrachostomus 153 Monitor, Central Asian Desert 246 Monitor, Gray's 61 Monitor, Yellow 243 moniziana, Geomitra 124 Monjita, Black-and-white 47 Monjita, Salinas 156 Monjon 135 Monkey, Allen's Swamp 140 Monkey, Andean Night 14 Monkey, Andean Titi 14 Monkey, Beni Titi 194 Monkey, Black Spider 241 Monkey, Blackish Squirrel 15 Monkey, Brown-headed Spider 14 Monkey, Brumback's Night 14 Monkey, Central American Squirrel 15 Monkey, Colombian Woolly 222 Monkey, Common Woolly 241 Monkey, Diana 15, 222 Monkey, Douc 15

Monkey, Dryas 194 Monkey, Elgon Blue 222 Monkey, Fernando Po Preuss's 222 Monkey, Fernando Po Crowned 222 Monkey, Fernando Po Red-eared 222 Monkey, François' Leaf 15 Monkey, Geoffroy's Spider 241 Monkey, Golden 222 Monkey, Golden Snub-nosed 15 Monkey, Grizzled Leaf 15 Monkey, Guizhou Snub-nosed 15 Monkey, Hybrid Spider 221 Monkey, Javan Fuscous Leaf 194 Monkey, Ka'apor Capuchin 15 Monkey, Kahuzi Owl-faced 222 Monkey, L'Hoest's 140 Monkey, Long-haired Spider 14 Monkey, Mainland Preuss's 222 Monkey, Mentawai Leaf 15 Monkey, Night 221 Monkey, Nilgiri Leaf 15 Monkey, Northern Brown Howling 221 Monkey, Owl-faced 140 Monkey, Pig-tailed Snub-nosed 15 Monkey, Preuss's 15 Monkey, Proboscis 15 Monkey, Red-handed Howling 221 Monkey, Roloway 222 Monkey, Somalia Sykes 222 Monkey, South Pacific Blackish Howling Monkey, Sun-tailed 15 Monkey, Tana River Sykes 222 Monkey. Tonkin Snub-nosed 15 Monkey, White-fronted Leaf 194 Monkey, White-throated 15 Monkey, Widow 241 Monkey, Yellow-tailed Woolly 15 Monkey, Yunnan Snub-nosed 15 Monkeyface, Appalachian 112 Monkeyface, Cumberland 255 Monklet, Lanceolated 154 monoceros, Monodon 196 monoceros, Rhinolophus 137 monochromos, Thomasomys 145 Monodelphis 3, 135 monodon, Cristilabrum 122 Monodon 196 monodonta, Cryptazeca 123 monodonta, Lamellidea 188 monodonta, Margaritifera 255 MONODONTIDAE 18, 196 monodosus, Afrithelphusa 95 Monolistra 97, 237 Monomorirm 100 Monomorium 101 Monophyllus 137 Monopterus 205 monorhis, Oceanodroma 146 monorthonyx, Anurophasis 149 MONOTREMATA 3, 219 monroensis, Cincinnatia 115 Monster, Gila 59 montagui, Partulina 188 montalentii, Discoglossus 66 montalivetensis, Amplirhagada 173 montana, Odontopodisma 108 montana, Paroreomyza 163

montana, Sheppardia 52 montana, Tricula 119 montana, Xenoligea 56 montani, Anthracoceros 44 montanus codiensis, Microtus 232 montanus fucosus, Microtus 232 montanus nevadensis, Microtus 232 montanus pictus, Thestor 252 montanus zygomaticus, Microtus 232 montanus, Psephenus 249 montanus, Alsodes 201 montanus, Andropadus 157 montanus, Charadrius 37 montanus, Dasymys 23 montanus, Isolobodon 179 montanus, Nyctalus 138 montanus, Prioniturus 41 montanus, Rattus 26 montanus, Stygobromus 89 montanus, Suncus 8 montecanoensis, Lepidoblepharis 59 montecristoi, Abronia 59 monteiri, Malaconotus 49 monteithorum, Euastacus 96 montenegrinus, Salmo 204 Monterissa 112 Monterrey, Platy 80 montezumae, Mastigodiaptomus 207 montezumensis, Pyrgulopsis 211 monticola, Archaeolacerta 243 monticola, Leiostyla 127 monticola, Melanotaenia 205 monticola, Nanocochlea 116 monticola, Zoothera 161 monticularis, Bunolagus 28 monticularis, Petromyscus 144 montis, Praomys 197 montisatris. Colophon 99 montisserrati, Diploglossus 59 montivagus, Myotis 138 montosa, Alticola 23 montserratensis, Trochoidea 175 Montserratina 174 Moonrat, Dinagat 6 mooreana, Partula 191 moorei, Etheostoma 83 moorei, Streptocephalus 91 Moorhen, Gough 36 Moorhen, Samoan 36 Moorhen, San Cristobal 36 Mops 13, 139 moquini, Haematopus 150 moralesi, Notropis 73 Mordacia 69, 201 mordax, Harpiocephalus 138 mordax, Notomys 178 mordax, Pipistrellus 139 mordax, Sturnira 137 moreaui, Nectarinio 161 moreaui, Orthotomus 51 moreleti, Clavator 120 moreletii, Crocodylus 199 Morelia 234 Morenia 166 morenoi, Glossophaga 137 moretonicus, Hyridella 255

morhua, Gadus 77

moricandi, Anisotremus 84 MORIDAE 77 Morimus 98 morio, Praomys 26 morio, Sylvisorex 8 mormo langei, Apodeniia 253 Mormolyce 248 mormonum buttoni, Monadenia 239 mormonum hirsuta, Monadenia 239 MORMOOPIDAE 11, 137 Mormoaps 137 Mormopterus 13 morondavana, Papilio 208 morongoana, Eremarionta 174 Morphnus 148 morrisi, Myotis 12 morrisi, Procambarus 95 morrisoni, Lytta 249 morrisoni, Pyrgulopsis 211 morrisoni, Stygabromus 89 Mortonagrion 106 Morus 146 mosana, Rhyacophila 255 moschata, Desmana 8 moschatus, Neotragus 131 MOSCHIDAE 20, 141, 226 moschiferus, Moschus 20 Moschus 20, 141, 226 Moserius 97 mossambica, Croilia 169 mossii bayensis, Callophrys 252 mostbento, Oligophlebodes 255 MOTACILLIDAE 48, 157 motebensis, Barbus 71 Moth, American Chestnut 186 Moth, Bent Wing Swift 252 Moth, Blackburn's Sphinx 254 Moth, Busk's Gall 252 Moth, Ceromatic Noctuid 253 Moth, Chestnut Clearwing 186, 254 Moth, Chestnut Ermine 186 Moth, Confused 186 Moth, Green Carposinid 252 Moth, Green-Banded Ohe Ohe Leaf-roller Moth, Hawaiian Hopseed Looper 186 Moth, Hebard's Noctuid 253 Moth, Hilo Noctuid 186 Moth, loxantha Looper 252 Moth, Kaholuamano Noctuid 186 Moth, Kern Primrose Sphinx 254 Moth, Kerr's Noctuid 186 Moth, Ko'olau Giant Looper 186 Moth, Kona Giant Looper 186 Moth, Laysan Dropseed Noctuid 186 Moth, Laysan Noctuid 186 Moth, Lemmer's Noctuid 253 Moth, Levuana 187 Moth, Lovegrass Noctuid 186 Moth, Marbled Underwing 253 Moth, Midway Noctuid 186 Moth, Minute Noctuid 186 Moth. Necker Leaf-miner 252 Moth. Ohe Ohe Leaf-roller 254 Moth, Ohenaupaka Oeobian 253 Moth, Ola'a Peppered Looper 186 Moth, Phleophagan Chestnut 186 Moth, Poko Noctuid 186

Moth, Prairie Sphinx 105 Moth, Precious Underwing 253 Moth, Silver Spotted Ghost 252 Moth. Small Lappet 102 Moth, Spanish Moon 208 Moth, Wallupe Leaf-Roller 254 Motmot, Keel-billed 154 Mouflon, Armenian 230 Mouflon, Cyprus 230 Mouflon, Esfahan 230 Mouflon, European 230 Mouflon, Laristan 230 Mouldingia 122 moulinsiana, Vertigo 133 Mountain-babbler, Chapin's 159 Mountain-babbler, Red-collared 159 Mountain-babbler, White-throated51 Mountain-finch, Cochabamba 55 Mountain-finch, Sillem's 199 Mountain-finch, Tucumán 55 Mountain-pigeon, Long-tailed 151 Mountain-robin, Dappled 50 Mountain-tanager, Golden-backed54 Mountain-tanager, Masked 54 Mountain-toucan, Black-billed 154 Mountain-toucan, Grey-breasted 154 Mountain-toucan, Hooded 154 Mountain-toucan, Plate-billed 154 mourae, Ceriagrion 208 mouroniensis, Zosterops 54 Mouse, Alabama Beach 233 Mouse, Alpine 197 Mouse, Anastasia Island Beach 233 Mouse, Black Hills Meadow Jumping 232 Mouse, California Red Tree 197 Mouse, Chadwick Beach Cotton 233 Mouse, Choctawhatchee Beach 233 Mouse, Dalzura Pocket 231 Mouse, Delany's 242 Mouse, Dollman's Tree 144 Mouse, Durant's Northern Grasshoper Mouse, Durrant's Northern Grasshopper Mouse, Florida 26 Mouse, Harvest 144 Mouse, Hastings River 26 Mouse, Izenhood Kangaroo 232 Mouse, Jacumba Pocket 232 Mouse, Key Largo Cotton 233 Mouse, Lakeland Downs 143 Mouse, Los Angeles Pocket 232 Mouse, Meadow Jumping 242 Mouse, Monomy White-footed 233 Mouse, Mountain Spring Pocket 231 Mouse, Northern Birch 143 Mouse, Owyhee River Kangaroo 232 Mouse, Pacific Pocket 232 Mouse, Palm Springs Pocket 232 Mouse, Perdido Key Beach 233 Mouse, Pilliga 26 Mouse, Point Reyes Jumping 232 Mouse, Ponce de Leon Beach 233 Mouse, Preble's Meadow Jumping 232 Mouse, Red-bellied Harvest 233 Mouse, Salinas Pocket 242 Mouse, Salt-marsh Harvest 26, 233 Mouse, San Diego Pocket 231 Mouse, Santa Rosa Beach 233

Mouse, Shark Bay 26 Mouse, Smoky 26 Mouse, Soda Spring Valley Kangaroo 232 Mouse, Southeastern Beach 242 Mouse, Southern Birch 143 Mouse, Southern Grasshopper 233 Mouse, Southern Marsh Harvest 245 Mouse, Spiny 23 Mouse, St Andrews Beach 233 Mouse, Steppe 144 Mouse, Tulare Grasshopper 233 Mouse, Western 26 Mouse, White-eared Pocket 142, 232 Mouse-lemur, Coquerel's 13 moussoni, Palaina 210 moutoni, Renea 113 Moxostoma 75, 168, 203, 243, 246 Mucket, Neosho 111 Mucket, Orangenacre 172 Mucket, Pink 111 Mucket, Salina 255 mucronata, Quadrasiella 210 Mud-minnow, European 76 Mudalia, Black 118 Mudalia, Knob 118 Mudfish, Black 204 Mudfish, Brown 168 Mudfish, Canterbury 77 Mudminnow, Olympic 168 muelleri, Heleia 161 muelleri, Hylobates 140 muelleri, Lewinia 36 muellerianus, Chalepoxenus 100 muenninki, Tokudaia 27 muensis, Noctepuna 214 mufumbiri, Laniarius 157 Mugger 58 MUGILIDAE 86, 244 Mugilogobius 87 muhlenbergii, Clemmys 64 mujanensis, Microtus 25 mulatta, Macaca 140 mulciber elwesii, Euploea 237 muletensis, Alytes 66 Mulgara 3 muliensis, Ochotona 197 mulleri, Homopholis 165 Mullet, Freshwater 244 Mullet, Saint Lucia 86 multilamellata, Thaumatodon 190 multipunctata, Tyto 152 multiradiatus, Girardinichthys 80 multispinosus, Gronocarus 250 multistriata, Charmosyna 152 multisulcata, Mysorelloides 119 multivesiculatus, Lutodrilus 172 multivolvis, Planorbella 113 multocarinata, Bolveria 182 muluensis, Lacconectus 249 munda, Galaxiella 168 mundaus, Stygobromus 89 mundus, Monarcha 159 munggai, Pachysaga 109 Mungos 195 Mungotictis 17 Munia, Black 163 Munia, Grey-banded 57 Munia, Grey-crowned

Munia, Pictorella 163 Munia, Yellow-rumped 163 munionga larana, Oreisplanus 252 munitus, Noturus 168 munroi, Nesotocus 248 Muntiacus 20, 197, 227 Muntjac, Black 20 Muntjac, Fea's 197 Muntjac, Gongshan 197 mupinensis, Turdus 161 murayamai, Euhadra 213 Murexia 193 MURICIDAE 173, 213 Muricopsis 213 muriculus, Gerbillus 242 Muriculus 25 MURIDAE 23, 131, 143, 178, 197, 232, 242, 245 muriei, Chasmistes 183 murina tatei, Sminthopsis 219 murina, Microperoryctes 193 Murina 12, 138, 194 murinus, Pseudohydromys 26 Muriqui 14 murivora, 'Athene' 181 muroides, Chiropodomys 143 murphyi, Acanthomyops 99 murphyi, Ngairea 214 murrayense, Pleurobema 112 Murrelet, Craveri's 150 Murrelet, Japanese 38 Murrelet, Marbled 150 Murrelet, Xantus's 150 Murunducaris 133 Mus 25, 144, 197 Musashitomiyo 247 Muscardinus 145 Muscicapa 51, 159, 199 MUSCICAPIDAE 49, 132, 158, 181, 198, musciculus, Pipistrellus 139 muscina, Kerivoula 12 muscinus, Hipposideros 10 Muscipipra 156 Muscocyclops 132 muscosa, Rana 68 musculus, Balaenoptera 225 musculus brevicauda, Balaenoptera 225 musculus, Balaenoptera 18 musicola, Hedylepta 186 Muskrat, Rio Grande 233 Musonycteris 11 MUSOPHAGIDAE 42, 152 musschenbroekii, Macrogalidia 18 Mussel, Dromedary Pearly 110 Mussel, Dwarf Wedge 255 Mussel, Oyster 255 Mussel, Salamander 255 mussoi, Neusticomys 25 Mussonena 122 Mustela 17, 177, 195, 224 MUSTELIDAE 17, 140, 177, 195, 224, 245 mustelina, Achatinella 120 mustelinus, Lepilemur 241

mutata, Batillaria 210 mutica, Omphalotropis 210 Muticaria 174 muticus. Pavo 35 MUTILLIDAE 251 mutisii, Eremophilus 204 mutoni, Praomys 144 muttui, Muscicapa 159 muwu, Ammopelmatus 108 Muzquiz, Bagre de 75 Muzquiz, Platy de 80 mweruensis, Bellamya 120 Myadestes 51, 159 myadestinus, Myadestes 51 Myaka, Myaka 85 myaka, Myaka 85 Myaka 85 MYCETOPHILIDAE 250 Mycotrupes 250 Mycteria 31, 147 Mycteroperca 83, 206 mydas, Chelonia 63, 234 Mydaus 17 myersi, Maoricicada 251 Myiagra 51, 159, 181 Myioborus 56, 163 Myiophobus 156 Myiophonus 51, 159 Myiornis 156 Myiotheretes 47, 156 mylergates, Labrochromis 184 **MYLIOBATIFORMES 70** Mylothris 253 Myna, Apo 164 Myna, Bare-eyed 164 Myna, Collared 164 Myna, Helmeted 164 MYOBATRACHIDAE 67, 167, 182, 201 MYODOCOPIDA 97 myoides, Xeromys 27 Myomimus 28 Myomys 25, 144 Myonycteris 9 myopica, Neoleptoneta 207 myoporicola, Oliarus 251 Myopterus 194 Myopus 144 Myosciurus 22 Myosorex 7 Myospalax 25, 144 Myotis, Bartel's 245 myotis, Myotis 138 Myotis 12, 13, 138, 177, 194, 245 MYOXIDAE 27, 145 myoxinus, Microcebus 13 Myoxocephalus 244 Myoxus 145 myrella, Kerivoula 12 Myrmecia 101 Myrmeciza 46 MYRMECOBIIDAE 3 Myrmecobius 3 Myrmecophaga 5 MYRMECOPHAGIDAE 5 Myrmecoxenus 101 MYRMELEONTIDAE 254 Myrmica 101

mustersi, Batrachuperus 68

myrmicoxena, Myrmica 101 Myrmoborus 46 Myrmosula 251 Myrmotherula 46, 155 Mysateles 28, 146 MYSIDACEA 97 MYSIDAE 97 Mysorelloides 119 mysorensis, Zosterops 162 mystacea, Aplonis 164 mystacea, Geotrygon 151 Mystacina 13, 177 MYSTACINIDAE 13, 177 mystax, Calomyscus 143 mysticetus, Balaena 224, 225 mysticetus, Balaena 129 Mystromys 25 Myxas 209 Myxus 244 Myzomela, Crimson-hooded 199 Myzomela, Red-rumped 162 Myzomela, Rotuma 54 Myzomela, White-chinned 199 Myzomela 54, 162, 199 Myzopoda 11 MYZOPODIDAE 11 mzymtae, Cordulegaster 106 Nabarlek 135, 220 naccarii, Acipenser 70 NACELLIDAE 187 nachicola, Euhadra 213 Nactus 59, 182 Naemorhedus 21, 141, 229 naessi, Paracyclopia 92 naevius, Ramphodon 153 naevosa, Stictonetta 32 nahani, Francolinus 198 nahuelbutensis, Diplomystes 203 naivashae, Tachyoryctes 27 Naja 200 nakadai, Lamellidea 188 Nakea, Oopu 206 namibensis, Laephotis 12 Namibocypris 185 Namibornis 159 namiyei, Rana 68 nana, Brachyphylla 137 nana, Cyanolyca 58 nana, Eurycea 68 nana, Microstrophia 128 nana, Stiobia 116 nana, Sturnira 11 nananae, Tropocyclops 92 Nancibella 190 nancillus, Gerbillus 143 Nannatherina 206 Nannoperca 82 Nannopsittaca 152 Nannospalax 25 nannotis, Litoria 66 Nanocochlea 116 Nanocopia 92 Nanodectes 109 nanodes, Napaeus 133 Nanogovi¾s 87 Nanoplectrus 255 nanoserranus, Prognathochromis 184

nanus, Accipiter 148 nanus, Cerion 123 nanus, Mesocapromys 28 nanus, Pseudomys 144 nanus, Pyrgulopsis 211 nanus, Somatogyrus 212 nanus, Spizaetus 33 nanus, Taoniscus 29 Napaeus 121, 133, 244 Napothera 51, 159 napu nigricans, Tragulus 226 narasingha narasingha, Erebia 253 narcondami, Aceros 44 Narwhal 196 nasalis, Philanthus 251 Nasalis 15 nasarovi, Microtus 144 Nase, Dalmation 202 Nase, South European 167 naso, Antechinus 193 naso, Euchoreutes 23 naso, Melasmothrix 24 naso, Paulamys 178 nasomaculatus, Addax 20 nassa, Lavigera 119 nassula. Elimia 117 Nasua 17 Nasuella 195 nasus, Coregonus 204 nasus, Lamna 69 nasuta, Ligumia 172 nasuta, Percina 169 nasuta, Rhinoclemmys 166 nasutus, Eptesicus 12 nasutus, Lanistes 114 natalensis, Cephalophus 130 natalensis, Kinixys 166 natalensis, Neritina 209 natalensis, Paradiaptomus 92 natalensis, Tomicha 118 NATALIDAE 11, 137 natalis, Zosterops 162 Natalus 11, 137 Natator 63 nationi, Chaetophractus 5 nativitatis, Rattus 178 natricina. Physella 210 natrix cetti. Natrix 234 natrix schweizeri, Natrix 234 Natrix 61, 234 nattereri, Anthus 48 nattereri, Ctenomys 145 nattereri, Heliconius 104 nattii, Partulina 213 NAUCORIDAE 251 Naultinus 243 naumanni, Falco 33 nausithous, Maculinea 170 navai. Hylorchilus 49 navajo, Stenopelmatus 109 navasi, Pyrenaearia 175 nayaur nayaur, Pseudois 230 nayaur szechuanensis, Pseudois 230 navaur. Pseudois 141 nazas, Cyprinodon 243 Nazas, Sardinita 246 ndamanyiluensis, Gulella 216

Neacomys 144 NEANURIDAE 250 nearcticus, Nemapalpus 99 neavei, Lanistes 114 nebulosa, Neofelis 16 nebulosus, Picumnus 155 nebulosus, Pseudocordylus 59 nechesae, Procambarus 95 neckerensis, Nysius 251 neckerensis, Petrochroa 252 necra, Carelia 189 Necrospar 182 Nectarinia 53, 161, 242 NECTARINIIDAE 53, 161, 242 Nectomys 25 Nectophrynoides 66 Necvdalis 248 Neduba 109, 187 Needle-clawed, Northern 139 neergaardi, Nectarinia 161 nefrens, Armatobalanus 208 neglectissimum, Falniowskia 173 neglectus, Argyrodiaptomus 207 neglectus, Molossops 13 neglectus, Pappogeomys 23 neglectus, Phalacrocorax 147 negrina, Crocidura 6 Nehalennia 106 neilli, Leopoldamys 24 neislerii, Amblema 110 Nekogigi 76 neli, Colophon 99 nelsoni, Ammospermophilus 22 nelsoni, Bufo 66 nelsoni, Heteromys 23 nelsoni, Miloderes 248 nelsoni, Nasua 17 nelsoni, Neotoma 25 nelsoni, Oryzomys 178 nelsoni, Terrapene 200 nelsoni, Vireo 163 nelsoni, Xenomys 145 Nemacheilus 74, 203 nemaeus, Pygathrix 15 Nemapalpus 99 Nematogenys 204 Nematostella 128 nemestrina, Macaca 15 nemorale, Bradypodion 164 nemoricola, Gallinago 37 Nemosia 55 **NEMOURIDAE 254** Nemours 254 Nene 32 NEOBALAENIDAE 242 NEOBISIIDAE 89, 207 neobrittanicus, Hydromys 24 neocaledonicus, Chalinolobus 12 Neochanna 77, 168, 204 Neochen 147 Neochmia 57 Neocrex 150 NEOCYCLOTIDAE 117, 188 Neodiaptomus 92 neodiversus, Euastacus 96 Neodrepanis 47 Neofelis 16

NEOGASTROPODA 120, 173, 213 Neogobius 206 Neohoratia 211 Neohydromys 25 neokohli, Pheidole 101 Neoleptoneta 207 Neolissochilus 73 neomexicana, Pyrgulopsis 256 neomexicanus, Plethodon 68 Neomixis 159 Neomorphus 42, 152 Neonemobius 133 Neonympha 253 Neophaedusa 214 Neophema 41, 152 Neophoca 242 Neophocaena 196, 225 Neoplanorbis 113 Neopteryx 9 Neorapana 213 neosa, Cryptochia 255 Neosalanx 76 Neoscaptor 8 Neoseps 60 Neosilurus 247 Neospiza 56 Neothauma 120 Neothramma 255 Neothraupis 162 Neotis 150 Neotoma 25, 144, 233 Neotragus 131, 141 Neotrichia 254 neoxenus, Euptilotis 44 Nephronaias 255 Nephrurus 59 NEPTICULIDAE 186 Neptis 253 Neptis 253 nequam, Hipposideros 10 nereis, Rhinolophus 137 nereis, Sterna 38 NERILLIDAE 110 NERITIDAE 112, 173, 209 Neritilia 173, 209 Neritina 112, 209 neritinoides, Stanleya 119 neritoides, Lanistes 114 Nerodia 246 nerterius, Cambarus 93 Nesasio 42 Neseis 251 Nesidiolestes 251 Nesillas 159, 181 nesiotes, Acomys 143 nesiotes, Deinocossonus 248 nesiotes, Scotorythra 186 nesiotica, Hirasea 214 nesioticus, Bulimulus 126 nesioticus, Erebonectes 92 nesiotis, Gallinula 36 Nesithmysus 248 Nesocichla 159 Nesoclopeus 36, 180 nesocrabo bidecoratus, Ectemnius 251 Nesocryptias 251 Nesoctites 155

Nesokia 144 Nesolagus 29 Nesomantis 68 Nesomimesa 251 Nesomimus 49 Nesophontes, Atalaye 177 Nesophontes, Haitian 177 Nesophontes, Saint Michel 177 Nesophontes, Western Cuban 177 Nesophontes 177 **NESOPHONTIDAE 177** nesopolus, Myotis 138 Nesopsar 163 Nesopupa 127, 191, 216, 217 Nesorestias 251 Nesoryzomys 25, 178 Nesospiza 55 Nesosydne 251 Nesothauma 254 Nesotocus 248 Nesotriccus 47 Nestor 41, 152, 181 netscheri, Nesolagus 29 nettingi, Plethodon 68 neumanni, Tropodiaptomus 92 neumoegeni, Papilio 105 Neurergus 201 **NEUROPTERA 254** Neusticomys 25 Neutrodiaptomus 207 nevadae, Crenichthys 79 nevadensis ssp., Cyprinodon 247 nevadica olmosa, Cicindela 248 nevermanni, Lonchura 163 nevilli, Erepta 190 nevilli, Gonospira 191 newberryi, Eucyclogobius 87 newcombi, Nesopupa 216 Newcombia 120, 121, 188 newelli, Hypena 186 newelli, Puffinus 30 Newnhamia 98 Newt, Great Crested 132 newtoni, Coracina 48 newtoni, Ctenoglypta 190 newtoni, Fulica 180 newtoni, Gonidomus 191 newtoni, Lanius 48 newtoni, Mesocricetus 25 newtoni, Thomea 214 Newtonia, Red-tailed 51 Newtonia 51 newtoniana, Prionodura 132 Ngairea 214 ngarduaisi, Palaua 215 nghetinhensis, Pseudoryx 22 niangarae, Mops 13 nianguae, Etheostoma 83 nicaraguensis, Quiscalus 163 nicefori, Thryothorus 49 nichollsi, Ardops 137 nickajackensis, Caecidotea 97 nickliniana awania, Helminthoglypta nickliniana bridgesi, Helminthoglypta 239

nickliniana contracosta. Helminthoglypta 239 nicobarica, Caloenas 150 nicobarica, Crocidura 6 nicobarica, Tupaia 8 nicobariensis, Hypsipetes 48 nicobariensis, Megapodius 34 nicolli, Ploceus 57 Nicrophorus 99 nidipendulus, Hemitriccus 156 nieuwenhuisii, Pycnonotus 198 nigella, Elliptio 110 niger avicennia, Sciurus 230 niger cinereus, Sciurus 231 niger shermani, Sciurus 231 niger variani, Hippotragus 228 niger vulpinus, Sciurus 231 niger, Cephalophus 141 niger, Hippotragus 130 niger, Melanosuchus 58 niger, Pteropus 9 niger, Yunnanilus 75 nigerrimus, Nesopsar 163 nigerrimus, Polyergus 101 Night-heron, Japanese 31 Night-heron, Mauritius 179 Night-heron, Rodrigues 179 Night-heron, White-eared 31 nightingaleensis, Katechonemertes 128 Nightjar, Bonaparte's 153 Nightjar, Cayenne 198 Nightjar, Itombwe 43 Nightjar, Long-trained 153 Nightjar, Puerto Rican 43 Nightjar, Pygmy 153 Nightiar, Roraiman 153 Nightjar, Salvadori's 198 Nightjar, Sickle-winged 153 Nightjar, Vaurie's 43 Nightjar, White-winged 43 nigra abingdoni, Geochelone 234 nigra becki, Geochelone 234 nigra chathamensis, Geochelone 234 nigra darwini, Geochelone 234 nigra ephippium, Geochelone 234 nigra galapagoensis, Geochelone 234 nigra guntheri, Geochelone 235 nigra hoodensis, Geochelone 235 nigra microphyes, Geochelone 235 nigra porteri, Geochelone 235 nigra vandenburghi, Geochelone 235 nigra vicina, Geochelone 235 nigra, Astrapia 164 nigra, Geochelone 65 nigra, Macaca 15 nigra, Melanoperdix 149 nigra, Pomarea 52 nigra, Tandonia 215 nigra, Trithemis 107 nigrescens, Gila 72 nigrescens, Macaca 129 nigrescens, Pacifastacus 93 nigrescens, Prognathochromis 184 nigrescens, Russatus 214 nigrescens, Thoopterus 136 nigricans nigricans, Poecilmitis 252 nigricans zwartbergae, Poecilmitis 252

nigricans, Aspideretes 65 nigricans, Chinemys 200 nigricans, Padogobius 87 nigricapillus, Lioptilus 159 nigricauda, Liobagrus 76 nigriceps, Ardeotis 37 nigriceps, Callithrix 14 nigriceps, Orthotomus 159 nigricollis hernandezi, Saguinus 221 nigricollis, Grus 36 nigrifrons rubidus, Cephalophus 228 nigrifrons, Cephalophus 141 nigrigenis, Agapornis 39 nigriloris, Estrilda 57 nigrimas, Oryzias 80 nigrimentum, Ploceus 57 nigrinoda, Graptemys 166 nigripes, Dacnis 54 nigripes, Hylopetes 142 nigripes, Mustela 177 nigripinnis, Coregonus 183 nigrirostris, Andigena 154 nigrita, Scotophilus 139 nigritella, Trochomorpha 217 nigritus, Epinephelus 82 nigriventer, Discoglossus 182 nigrivestis, Eriocnemis 43 nigrobrunnea, Tyto 42 nigrocapillus, Nothocercus 146 nigrocapitatus, Stenopelmatus 133 nigrocinctus, Procambarus 95 nigrocoerula subtropica, Cicindela 248 nigrocyaneus, Todirhamphus 154 nigrofasciatus, Puntius 132 nigrogularis, Clytorhynchus 158 nigrogularis, Phalacrocorax 147 nigrogularis, Psophodes 52 nigrohamatum, Megalagrian 171 nigrolineatum, Megalagrion 106 nigrolineatus, Syngnathus 205 nigromaculatus, Yunnanilus 75 nigropectus, Biatas 45 nigropunctatus, Pontinus 82 nigrorufa, Ficedula 158 nigrorufa, Sporophila 55 nigrorufus, Centropus 42 nigrorum, Stachyris 52 nigrostriata, Galaxiella 168 nigroviridis, Allenopithecus 140 nihoae, Banza 109 nihoae, Nysius 251 nihoaensis, Eupelmus 251 nihoaensis, Sclerodermus 251 niihauensis, Odynerus 251 nikhili, Oligodon 200 nikolausi, Megadendromus 24 Nilgai 130 nilgiriensis, Parantica 171 Nilssonia 66 Niltava, Fujian 159 Niltava 159 nimbae, Crocidura 241 nimberlinus, Prymnbriareus 244 nimbus, Oreokera 214 ninae, Zaprochilus 109 Ningbingia 122 Ninox 42, 152

niobe, Lariscus 142 niobe, Orachrysops 103 nipalensis, Aceros 44 nipalensis, Bubo 152 nipalensis, Pitta 156 NIPHARGIDAE 90, 237 Niphargobates 90 Niphargus 90, 237 niphobles, Takifugu 207 nippon aplodontus, Cervus 227 nippon grassianus, Cervus 227 nippon keramae, Cervus 227 nippon kopschi, Cervus 227 nippon mandarinus, Cervus 227 nippon mantchuricus, Cervus 227 nippon pseudaxis, Cervus 227 nippon pulchellus, Cervus 227 nippon sichuanicus, Cervus 227 nippon taiouanus, Cervus 227 nippon yesoensis, Cervus 227 nippon, Nipponia 31 Nipponia 31 Nirodia 103 nishinoi, Cyathopama 210 nitedula, Dryomys 145 nitella, Dupontia 124 nitendiensis, Pteropus 9 nitens, Cochlicopa 245 nitens, Haliplus 249 nitida, Ogasawarana 209 nitidissima, Alectroenas 180 nitidissima, Chlorochrysa 54 nitidulus, Formicoxenus 100 nitidus, Liolaemus 199 Nitocrella 96 nitai, Atelagnathus 66 nitratoides exilis, Dipodomys 232 nitrataides nitrataides, Dipodomys 232 nitratoides, Dipodomys 142 nivalis, Chionomys 143 nivalis, Daphnia 91 nivalis, Leptanycteris 11 niveatus, Epinephelus 82 niveogularis, Aegithalos 161 Niveoscincus 60 nivicola borealis, Ovis 229 nivicola nivicola, Ovis 230 nivicola, Ovis 131 Niviventer 144 njombe, Cisticola 158 noanamae, Bucco 154 nobilis, Gambusia 80 nobilis, Moho 181 nobilis. Petaurista 142 nobrei, Conus 120 Nobuea 210 Noctepuna 214 noctitherus, Caprimulgus 43 noctivagus, Crypturellus 146 NOCTUIDAE 186, 253 Nodipecten 209 nodosa, Partula 191 nodosus, Alsodes 201 noguchii, Sapheopipa 45 nokomis caerulescens, Speyeria 253 nakomis nokomis, Speyeria 253 nollothi, Aloeides 102

nolthenii, Vandeleuria 27 Nomoramphus 205 Nomorhamphus 81 Nonnula 154 nonpareil, Chilonopsis 192 Nopili, Oopu 169 norae, Sudisorex 8 nardmanni, Glareala 150 norfolcensis, Petaurus 135 Norfolcioconch 123 norfolkensis, Norfolcioconch 123 narfolkensis, Posticobia 188 noricum, Bythiospeum 115 norrisi, Acicula 113 nortani, Stygobromus 89 nossima, Amauris 104 notabilis, Binneya 213 notabilis, Lichmera 199 notabilis, Nestor 152 Natarthrinus 252 notata, Campethera 154 notata, Kimberleyeleotris 169 notatus, Coturnicops 198 notatus, Thomasomys 145 Notechis 234 notera, Palline 214 Nothaldonis 248 nothapalinus crenatum, Opeas 240 Nothobranchius 79 Nothocercus 146 nothofagi, Eusthenia 209 Nothomyrmecia 101 Nothoprocta 29 Nothura, Lesser 29 Nothura 29 Notiomystis 54 notius, Micropterus 169 Notochelys 200 Notodiaptomus 92 NOTODROMADIDAE 98 Notomys 25, 144, 178 NOTONEMOURIDAE 254 Notapala 120 NOTOPTERIDAE 167 Notopteris 9 NOTORYCTEMORPHIA 4 Notoryctes 4 NOTORYCTIDAE 4 notosaurus, Oligosoma 243 notosticta, Aimophila 162 NOTOSTRACA 97 Notrapis 73, 168, 183, 202 nottensis, Cupedora 122 Noturus 75, 168, 203 naualhieri, Monomorirm 100 novacaledoniae, Rhantus 185 novacapitalis, Scytalopus 46 novaeangliae, Megaptera 18 novaeguineae, Harpyopsis 33 novaeguineae, Planigale 3 novaehebudorum, Hippocampus 81 novaeseelandiae, Falco 149 novaeseelandiae, Thinornis 37 novaesi, Philydor 45 novaezelandiae, Coturnix 180 novaezelandiae, Himantopus 37 novaezelandiae, Ixobrychus 179

novelta, Amplirhagada 256 Novumbra 168 Nsess 86 nuba, Neotis 150 nubiana, Capra 21 nubila caymanensis, Cyclura 234 nubila lewisi, Cyclura 234 nubila nubila, Cyclura 234 nubila, Cyclura 60 nubila, Polyphylla 250 nubilus, Aloeides 102 nubrica, Ochotona 242 nuchale, Etheostoma 83 nuchalis, Garrulax 159 nuchalis, Parus 53 nuchisquamulatus, Xystichromis 86 nucifraga, Cherax 208 nucleopsis, Pleurobema 112 nudicollis, Procnias 156 nudicostata, Setomedea 174 nudiventris, Acipenser 235 nudiventris, Acipenser 70 nudiventris, Typhlobarbus 74 nueces, Procambarus 95 Nukupuu 56 nulemex, Mexistenasellus 97 nulloporius, Engaeus 95 Numbat 3 Numenius 37, 38, 150 numidicus, Theodoxus 209 nunatakensis, Dicrostonyx 197 Nunlet, Chestnut-headed 154 nuptialis, Anoplolepis 100 nusatenggara, Cynopterus 136 Nuthatch, Algerian 53 Nuthatch, Beautiful 53 Nuthatch, Corsican 161 Nuthatch, Giant 53 Nuthatch, Snowy-browed 161 Nuthatch, White-browed 53 Nuthatch, Yellow-billed 53 Nuthatch, Yunnan 53 nux, Bulimulus 126 nyakalensis, Litoria 66 Nyala 131 Nyala, Mountain 22 nyanzae, Harpagochromis 184 nyassanus, Bulinus 113 Nyctalus 13, 138 nycteas, Neptis 253 nyctelia, Cecilioides 215 NYCTERIDAE 10, 136 Nycteris 10, 136 Nycticebus 14 Nycticeius 139 Nycticorax 179 Nyctimene 9, 136, 177 Nyctimystes 66 Nyctiphrynus 153 Nyctophilus 13, 139, 177 nylephtha, Ecchlorolestes 171 Nymph, Sthenele Wood 253 nympha, Pitta 47 NYMPHALIDAE 104, 170, 208, 237, 244, 253 Nymphophilus 256 nyoraensis, Boeckella 91

nyraca, Aythya 32 Nysius 251 nyssanus, Lanistes 114 oahuense, Megalagrion 106 oahuensis, Nesopupa 216 oahuensis, Phyllococcus 186 oasis, Hydroporus 248 oaxacae, Kinosternon 166 oaxacensis, Microtus 144 obbiensis, Spizocorys 157 Obelus 126 oberi, Icterus 163 oberlaenderi, Zoothera 161 oberthueri, Pyrenaearia 175 oberthurii, Ideopsis 104 obesa, Brazieria 217 obesiuscula, Boettgeria 123 obesoductus, Arion 213 obesulus fusciventer, Isoodon 219 obesulus nauticus, Isoodon 219 obesulus obesulus, Isoodon 219 obesulus peninsulae, Isoodan 219 abesus, Thunnus 88 obesus, Thunnus 236 obeyensis, Cambarus 93 obiensis, Melomys 144 obliquata obliquata, Dysnomia 255 obliquata obliquata, Epioblasma 238 obliquata perobliqua, Dysnamia 255 obliquata perobliqua, Epioblasma 238 obliquicosta, Pupilla 191 obliquidens, Haplochromis 85 obliquidens, Lagenorhynchus 242 obliquus, Chaetodon 84 obliquus, Elasmodontomys 179 obliviosus, Rousettus 136 oblonga, Chelodina 165 Obovaria 111, 172 obruta, Helix 125 obscura, Edelia 82 obscura, Luscinia 51 obscura, Metrarga 251 obscura, Pentarthrum 248 obscura, Telmatherina 79 obscurus, Lariscus 142 obscurus, Artibeus 137 obscurus, Carcharhinus 69 obscurus, Charadrius 37 obscurus, Hemignathus 181 obscurus, Hipposideros 136 obscurus, Lagenorhynchus 195 obscurus, Mesomys 197 obscurus, Tetraophasis 149 obserata, Actinella 174 obsaleta neojuvenalis, Cicindela 248 obtecta, Spirorbula 174 abtusidens, Gaurochromis 184 obtusifrons, Hephaestus 206 obtusirostris, Calcochloris 241 obtusirostris, Salmothymus 77 obtusus, Cylindrus 174 obtusus, Somatogyrus 212 Ocadia 166, 200 occidentalis lacusanserinus, Catostomus 246 occidentalis sonorensis, Poeciliopsis 236

occidentalis, Avahi 14 occidentalis, Daphnia 91 occidentalis, Dysithamnus 45 occidentalis, Geopsittacus 41 occidentalis, Glacidorbis 113 occidentalis, Leucopternis 33 occidentalis, Linderiella 169 occidentalis, Mouldingia 122 occidentalis, Nectophrynoides 66 occidentalis, Onychorhynchus 47 occidentalis, Otomys 25 occidentalis, Pila 173 occidentalis, Poeciliopsis 168 occidentalis, Pseudocheirus 4 occidentalis, Pseudohydromys 26 occidentalis, Pseudomys 26 occidentalis, Ptychobranchus 172 occidentalis, Strix 153 occidentalis, Triodopsis 215 occidentaloides, Trimerotropis 108 occiduus, Celestus 182 occiduus, Gerbillus 24 Occirhenea 127 occulens, Trimerotropis 108 occulta, Vertigo 175 occultata, Leptoxis 118 oceanicum, Megalagrion 106 oceanicus, Lacconectus 249 Oceanides 251 Oceanites 197 Oceanodroma 30, 146, 197, 198 ocellata lyncus, Lethe 253 ocellata, Agriocharis 149 ocellata, Leipoa 34 ocellata, Morenia 166 ocellata, Phelsuma 165 ocellata, Rheinardia 35 ocellata, Turnix 149 ocellatus smithi, Rhodeus 236 ocellatus, Cyrtonyx 149 Ocelot, Texas 223 Ochotona 28, 146, 197, 233, 242 OCHOTONIDAE 28, 146, 179, 197, 233, ochracea, Leptodea 172 ochraceifrons, Grallaricula 155 ochraceiventris, Leptotila 39 ochraceus, Contopus 156 ochreata brunnescens, Macaca 245 ochreata, Macaca 194 ochrocephala, Mohoua 51 ochrogaster, Penelope 34 ochrogaster, Rhipidomys 145 ochroleucus, Hylopezus 155 ochropectus, Francolinus 35 ochropyga, Drymophila 155 Ochrotrichia 254 ochsneri, Bulimulus 126 Ochthebius 249 Ochthoeca 156 ochthogyra, Omphalotropis 210 Oclandius 248 oconnori, Rhytida 127 octaploidus, Bulinus 173 octava, Ningbingia 122 Octodon 28 OCTODONTIDAE 28

octolamellata, Taipidon 190 octomaculata, Dalla 208 octosetaceus, Mergus 32 ocularis, Graphiurus 28 ocularis, Pteropus 9 oculata, Stagonopleura 163 oculifera, Graptemys 64 oculta, Parapheidole 101 Ocyceros 154 **ODOBENIDAE 224** Odobenus 224 Odocoileus 227 odomae, Metallura 153 ODONATA 105, 171, 187, 208, 237, 244 **ODONTASPIDIDAE** 69 odontina, Erepta 125 **ODONTOCERIDAE 255** Odontodiaptomus 207 Odontophorus 35, 149 Odontopodisma 108 Odynerus 251 Oecanthus 108 Oecetis 254 Oecomys 25 oeconomus amakensis, Microtus 232 oeconomus elymocetes, Microtus 232 oeconomus innuitus, Microtus 232 oeconomus popofensis, Microtus 232 oeconomus punukensis, Microtus 232 oeconomus sitkensis, Microtus 232 oeconomus, Microtus 144 Oedemasylus 185 oedippus, Coenonympha 171 oedipus, Saguinus 14 oedipus, Schistura 75 oenanthe, Callicebus 14 oenax, Wilfredomys 242 Oenomys 197 oenops, Columba 38 Oeobia 186 Oeoblia 253 oerstedi citrinellus, Saimiri 222 oerstedi oerstedi, Saimiri 222 oerstedii, Saimiri 15 Oestophora 174 Offachloritis 122 offella, Boromys 178 ogasawarae, Boninena 121 ogasawarae, Boninosuccinea 128 ogasawarana, Gastrocopta 191 ogasawarana, Lamellidea 120 ogasawarana, Ogasawarana 209 ogasawarana, Trochochlamys 124 Ogasawarana 112, 209 ogasawarensis, Hemicordulia 106 ogasawarensis, Rhinocypha 106 Ogilbia 204 ogilbyi crusalbum, Cephalophus 228 ogilbyi, Melanotaenia 205 ogilbyi, Cephalophus 141 oglei, Stachyris 52 Ogmodon 62 ogmoraphe, Pyrgulopsis 256 Ognorhynchus 41 oheoheana, Spheterista 254 ohridana, Acantholingua 77

Ohridohauffenia 188

oinotheke, Eucrenonaspides 90 Ojiazul, Guayacon 184 okalehubyi, Hydaticus 248 okaloosae, Etheostoma 83 okamurai, Cipangocharax 213 Okapi 141 Okapia 141 okatie, Elassoma 83 okeana, Allocharopa 174 okiensis, Hynobius 68 okinawae, Gallirallus 36 okinawanus, Rhipidolestes 107 okinawensis, Hemicordulia 106 oktediensis, Melanotaenia 78 okuensis, Lamottemys 24 okuensis, Myosorex 7 olallae, Callicebus 194 Olallamys 146 oleacina, Videna 217 Oleacina 190 OLEACINIDAE 190, 215 oleagineus, Zosterops 54 olearia, Ranella 173 olfax, Mycteroperca 83 Oliarces 254 Oliarus 251 Oligoaeschna 106 OLIGOCHAETA 109, 172 Oligodon 200 oligolepis, Toxotes 244 Oligolepis 169 OLIGONEURIIDAE 250 Oligophlebodes, Tombstone Prairie 255 Oligophlebodes 255 Oligoryzomys 25, 144 Oligosoma 60, 61, 165, 200, 243 olivacea, Carelia 189 olivacea, Lepidochelys 63 olivacea, Nasuella 195 olivacea, Pyrgulopsis 211 olivaceofuscus, Turdus 161 olivaceus, Criniger 48 olivaceus, Geocolaptes 154 olivaceus, Hypsipetes 48 olivaceus, Varanus 61 Olive-pigeon, Comoro 151 oliveri, Cyclodina 243 oliveri, Haematopinus 98 oliviae, Columba 38 olivieri, Amaurornis 36 olivii, Turnix 35 olivula, Elimia 117 ollula, Sylvisorex 241 Olm 68 Olomao 51 Oloplotosus 76 olrogi, Andalgalomys 23 olympiae, Carabus 98 omalonotus, Pachypanchax 243 omeiensis, Liocichla 51 Omphalotropis 114, 187, 210, 256 Onager 225 onca, Panthera 140 onca, Rana 68 Onchobarus 248 Onchomys 233

Oncifelis 16, 241 Onconotus 109 Oncorhynchus 77, 204, 247 Ondatra 233 oniscus, Oryzomys 144 onondagaensis, Stygobromus 89 onslowi, Phalacrocorax 31 Onthophagus 250 Onychodiaptomus 207 Onychogalea 4, 177 Onychognathus 57 Onychogomphus 107 Onychomys 233 ONYCHOPHORA 109, 171, 187, 209, 255 Onychorhynchus 47 Onychostoma 73 Oo, Bishop's 54 Oo, Hawaii 181 Oo, Kauai 54 Oo, Oahu 181 oophorus, Xenopoecilus 81 Oopu 206 oosthuizen, Lepidochrysops 103 opalescens, Cynolebias 79 Opanara 123 oparica, Ruatara 123 Opata, Matalote 75 Opeas 240 Openbill, Asian 147 operculina, Hirasea 124 Opheodrys 165 OPHIDIIFORMES 77, 204, 247 Ophidiocephalus 60 Ophiogomphus 244 Ophiogomphus 107, 171, 238 Ophisternon 82, 205 Ophrysia 35 **OPILIONES 88** opiocephalus, Zosterisessor 207 opiranus, Turgenitubulus 122 opistherythra, Rhipidura 160 opisthomelas, Puffinus 30 Opisthopatus 187 Opisthotropis 61, 200 Opsaridium 73 optima, Ogasawarana 209 Optioservus 249 opudi, Telmatherina 79 opuntia, Micrarionta 125 Orachrysops 103 oralis, Pseudamys 26 Orambanonga 208 Orambato 208 Orang-utan 16 Orangia 123 oratrix, Amazona 40 Oravelia 251 orbicularis, Emys 165 orbignyi, Rhantus 185 orbitatus, Hemitriccus 156 orca, Notropis 183 orca, Orcinus 129 Orcaella 195 orcesi, Pyrrhura 41 Orchesticus 162 ORCHESTIIDAE 90 orcinus orcinus, Niphargus 237

Onchotelson 97

orcinus, Procambarus 95 Orcinus 129 Orconectes 94, 237 orconectoides, Hobbseus 94 orcula, Pupisoma 133 Orcula 175, 215 ORCULIDAE 175, 215 Ordtrachia 122, 174 Oreailurus 16 oreas oreas, Lepidochrysops 252 oreas, Chrysoritis 170 oreas, Dendromus 23 oreas. Picathartes 52 ORECTOLOBIFORMES 201 oregona, Dolophilodes 255 Oregonian, Mission Creek 127 Oregonichthys 73, 168 oreias, Myotis 194 oreinos, Trichia 215 Oreisplanus 252 Oreochromis 85, 247 Oreoglanis 76 OREOHELICIDAE 126, 239 Oreohelix 126, 239 Oreokera 214 Oreolyce 252 Oreomanes 162 Oreomava 123, 214 Oreomystis 56 Oreonectes 75 Oreophasis 34 oreophila, Catamenia 162 oreopolus, Sorex 136 Oreoscopus 159 Oreothraupis 55 oreotragus porteousi, Oreotragus 229 oreotragus, Oreotragus 131 Oreotragus 131, 229 Oreotrochilus 153 oresterus, Heteromys 142 Orestias 80, 168, 205 organiaca, Pyrenaearia 175 orgygia, Belenois 253 Oribi 131 Oribi, Haggard's 229 Oribi, Kenya 229 oriensis, Srilankamys 145 orientalis ophion, Ovis 230 orientalis arkal, Ovis 230 orientalis bocharensis. Ovis 230 orientalis cycloceros, Ovis 230 orientalis gmelinii, Ovis 230 orientalis isphahanica, Ovis 230 orientalis laristanica, Ovis 230 orientalis musimon, Ovis 230 orientalis orientalis, Ovis 245 orientalis punjabiensis, Ovis 230 orientalis severtzovi, Ovis 230 orientalis vignei, Ovis 230 orientalis, Collocalia 198 orientalis, Crocidura 7 orientalis, Jaculus 143 orientalis, Mogurnda 244 orientalis, Mouldingia 122 orientalis, Ovis 21 orientalis, Paradelma 60 orientalis, Poecilmitis 103

orientalis, Uperoleia 201 orientalis, Vespertilio 13 orientissimus, Microcryptorhynchus248 Origma 159 Origma 159 orii, Crocidura 7 orinocensis, Lonchorhina 137 orinus, Galagoides 194 Oriole, Black 164 Oriole, Isabela 57 Oriole, Martinique 56 Oriole, Montserrat 163 Oriole, São Tomé 57 Oriole, Silver 57 Oriole, St Lucia 163 Oriolia 49 ORIOLIDAE 57, 164, 199 Oriolus 57, 164 oriplancta, Dirce 252 oriundus, Sylvisorex 8 Orlitia 166 ornata, Terrapene 166 ornata, Lampsilis 172 ornata, Perdicella 213 ornata, Urocissa 58 ornatus, Scotomanes 139 ornatus, Anthops 10 ornatus, Liophis 61 ornatus, Pteropus 9 ornatus, Tremarctos 18 Ornipholidotos 252 Ornithoptera 105, 171, 208, 244 Oroaetus 148 oron, Philocasca 255 Oropendola, Baud¾ 56 orophobata, Niphargobates 90 orostruthus, Arcanator 50 orpheus, Pachycephala 160 orramakunna, Engaeus 96 Ortalis 34 ORTHALICIDAE 126, 190, 215, 239, 256 Orthalicus 215 Orthetrum 209, 238 Orthogeomys 22, 142 orthognathus, Oryzias 80 ORTHOPTERA 108, 133, 187, 209, 254 orthostoma, Platyla 210 orthostoma, Pyxichromis 86 Orthotomus 51, 159 ortizi, Incaspiza 162 ortizi, Oestophora 174 ortmanni, Villosa 256 ortoni, Penelope 34 orycta, Pronesopupa 216 Oryctes 250 Orvmaeus 121 Oryx, Arabian 21 Oryx, Beisa 229 Oryx, Fringe-eared 229 Oryx, Scimitar-horned 21 oryx, Tragelaphus 131 Oryx 21, 131, 229 Oryzias 80, 81 oryzivora, Padda 57 Oryzoborus 162 Oryzomys 25, 144, 178, 197, 233 orzai, Helicella 174

osborni, Clidomys 179 Osbornictis 195 osburni, Etheostoma 169 osburni, Vireo 163 oscillans, Rhinomyias 160 oscitans, Anastomus 147 oscitans, Potamopyrgus 173 osculus ssp., Rhinichthys 246 osgoodi, Monodelphis 3 osgoodi, Rhinolophus 194 osgoodi, Tinamus 197 osimensis, Tokudaia 27 osmana, Papilio 105 OSMERIDAE 76, 204 Osmerus 204 Osmoderma 99 osorio, Crocidura 7 Ospatulus 73 ostenta, Coracina 48 OSTEOGLOSSIDAE 70, 167, 202 OSTEOGLOSSIFORMES 70, 167, 202 Osteolaemus 58 Ostodes 212 OSTREOIDA 209 otagense, Oligosoma 61 otaheitana, Partula 127 otareae, Sinployea 190 OTARIIDAE 17, 224, 242 othcaloogensis, Dysnomia 255 othcaloogensis, Epioblasma 110 othnius, Kondoconcha 123 othus, Lepus 242 OTIDIDAE 37, 150, 242 Otis 37 Otocolobus 223, 241 Otolemur 139 Otomops 13 Otomys 25, 144 Otopteropus 9 Otter, European 245 Otter, Giant 17 Otter, Hairy-nosed 17 Otter, La Plata 245 Otter, Marine 17 Otter, Oriental Small-clawed 140 Otter, Smooth-coated 17 Otter, Southern River 17 Otter-civet 18 Otter-shrew, Nimba 5 Otter-shrew, Ruwenzori 5 ottomana, Erebia 253 Otus 42, 152, 153, 245, 246 otwayensis, Oreomava 123 Ou 56 ouachitae, Plethodon 167 oualanensis, Delos 216 oubanguii, Mus 25 Ougapia 216 ourebi haggardi, Ourebia 229 ourebi keniae, Ourebia 229 ourebi, Ourebia 131 Ourebia 131, 229 oustaleti, Phylloscartes 156 outeniqua, Lepidochrysops 103 ovata, Lampsilis 172 ovata, Vertigo 175 ovatula, Palaina 210

oviforme, Pleurobema 112 Ovis 21, 131, 229, 230, 245 ovuliformis, Cylichnidia 124 owenii, Apteryx 29 Owl, Andaman Hawk 152 Owl, Andaman Scops 152 Owl, Buff-fronted 152 Owl, Fearful 42 Owl, Laughing 181 Owl, Madagascar Red 42 Owl, Mauritian 181 Owl, Powerful 42 Owl, Rodrigues Little 181 Owl, Spotted 153 Owl, Unspotted Saw-whet 152 Owlet, Albertine 42 Owlet, Chestnut-backed 152 Owlet, Forest 42 Owlet, Long-whiskered 153 Owlet-nightjar, New Caledonian 43 owstoni, Chrotogale 18 owstoni, Gallirallus 180 Ox, Vu Quang 22 oxiana, Naja 200 oxleyana, Nannoperca 82 Oxychaeta 103 Oxychilus 128, 175 Oxyeleotris 206 Oxyepoecus 101 Oxyethira 254 Oxygastra 106 Oxylapia 85 Oxyloma 128 Oxymycterus 25 oxyrhynchus, Notropis 202 oxyrhynchus, Prototroctes 183 oxyrinchus desotoi, Acipenser 235 oxyrinchus oxyrinchus, Acipenser 235 oxyrinchus, Acipenser 167 oxyrinchus, Coregonus 204 oxytropis, Discula 124 oxyura, Treron 151 Oxyura 32 oyapocki, Neusticomys 25 Oystercatcher, African 150 Oystercatcher, Canary Islands 180 Oystercatcher, Chatham Islands 37 ozarkensis, Fusconaia 172 ozarkensis, Pyrgulopsis 211 ozarkensis, Somatochlora 171 ozarkensis, Stygobromus 89 ozensis, Myotis 194 Ozotoceros 141, 227 Pacarana 28 pachomai, Kawanphila 109 Pachycephala 132, 159, 160 pachycephalus, Cyprinodon 79 pachycephalus, Harpagochromis 184 pachycheilus, Cephalakompsus 71 Pachychilon 168, 202 pachygaster, Liosaccus 88 pachyotis, Eptesicus 138 Pachypanchax 79, 243 Pachyramphus 156 pachyrhyncha, Rhynchopsitta 41 pachyrhynchus, Eudyptes 29 Pachysaga 109

pachystoma, Ryssota 215 Pachystyla 190 pachyta, Pyrgulopsis 211 Pacifastacus 93 pacifica, Drepanis 181 pacifica, Gallinula 36 pacifica, Myrmosula 251 pacifica, Syncaris 93 pacificum, Megalagrion 106 pacificus, Gallirallus 180 pacificus, Larus 150 pacificus, Mesoplodon 196 pacificus, Octodon 28 pacis, Doronomyrmex 100 packardi, Lepidurus 97 Padda 57, 163 Paddlefish 70 Paddlefish, Chinese 70 Pademelon, Calaby's 4 Pademelon, Dusky 4 Pademelon, New Guinea 4 padiraci, Bythinella 115 Padogobius 87, 169 pagensis pagensis, Macaca 245 pagensis, Macaca 15 pagensis, Maxomys 144 pagoda, Gyrotoma 117 pagodiformis, Bellamya 120 pagodula, Turgenitubulus 122 pagodula, Videna 217 pagrus, Pagrus 84 Pagrus 84 pagurus, Isothrix 146 paillona, Renea 113 Pait 73 Palacanthilhiopsis 116 palaciosi, Iberocypris 72 Paladilhia 116, 173 Paladilhiopis 116 Palaemnema 108 Palaemonetes 95 Palaemonias 93 PALAEMONIDAE 95 palaemophagus, Ospatulus 73 palaestinensis, Acicula 113 palaestinensis, Strongylognathus 102 Palaina 210, 211, 256 Palata 74 palata, Spratellicypris 74 palatilis, Zyzomys 27 palatina, Neotoma 144 Palaua 215 palauensis, Assiminea 210 palauensis, Megazosterops 161 palawanense, Malacopteron 51 palawanensis, Crocidura 7 palawanensis, Tupaia 8 Palawanomys 25 Palea 166 Paleoxenus 249 palfreymani, Niveascincus 60 Palikirus 214 Palila 56 pallasi hamica, Ochotona 233 pallasi sunidica, Ochotona 233 palliata aequatorialis, Alouatta 241 palliata mexicana, Alouatta 221

palliatus, Cinclodes 45 palliatus, Paraxerus 22 pallida, Jardinella 116 pallida, Vulpes 195 pallidiceps, Atlapetes 54 pallidiceps, Columba 38 pallididorsum, Etheostoma 83 pallidigaster, Anthreptes 53 pallidipectoris, Acanthochelys 62 pallidistylus, Diaphlebia 107 pallidula, Nehalennia 106 pallidus restrictus, Microdipodops 232 pallidus, Conolophus 59 pallidus, Euoticus 139 pallidus, Luciogobius 206 pallidus, Phloeomys 144 pallidus, Sphiggurus 178 Palline 214 pallipes, Austropotamobius 93 pallipes, Cyornis 158 palliseri, Bradypterus 158 Palmal, Cachorrito de Charco 183 palmarum, Charmosyna 152 palmarum, Corvus 164 palmarum, Rattus 26 palmeri, Myadestes 51 palmeri, Porzana 180 palmeri, Rhodacanthis 181 palmeri, Tamias 22 Palmeria 56 Palpopleura 107 palu, Atrophaneura 208 paludica, Cabitis 168 paludicala, Acrocephalus 49 Paludinella 210, 211 Paludiscala 116 Paludomus 119 palumboides, Columba 151 palustre, Pellorneum 51 palustris hefneri, Sylvilagus 234 palustris natator, Oryzomys 233 palustris, Crocodylus 58 palustris, Quiscalus 182 palustris, Sporophila 55 palustris, Tropodiaptomus 207 Pampa-finch, Pale-throated 162 pan, Paecilmitis 208 Pan 16, 223 panamensis, Tylomys 27 panamintus, Gerrhonotus 59 panarcys, Cyprinella 71 Panchala 252 pancheri, Leuchocharis 126 Panda, Giant 17 Panda, Lesser 18 Pandaka 87 Pangasianodon 76 PANGASIIDAE 76, 203 Pangasius 203 panglima, Maxomys 144 Pangolin, Chinese 142 Pangolin, Indian 142 Pangolin, Malayan 142 Pangolin, Temminck's Ground 142 pani, Cuora 200 panini, Penelopides 44 paniscus, Ateles 241

paniscus, Pan 16 panizzai, Knipowitschia 206 pannonica, Sadleriana 116 panonica, Imnadia 92 Panoguina 170, 252 panoquinoides errans, Panoquina 252 Pantagenia 186 Pantanodon 80 Panther, Florida 224 Panthera 16, 140, 223, 224 pantheratus, Anetia 170 pantherina, Percina 84 Pantholops 21 Pantinonemertes 217 pantostictum, Cichlasoma 85 Panuco, Bagre del 203 Panulena 190 Papagomys 25, 178 Papasula 30 Papilio 244 papilio, Eurypegasus 205 Papilio, Taita Blue-banded 253 Papilio 105, 171, 208, 244, 253 PAPILIONIDAE 105, 171, 208, 244, 253 Papilloderma 175 PAPILLODERMIDAE 175 Papillogobius 169 papillosa, Pseudibis 147 papio, Papio 140 Papio 140 Pappogeomys 22, 23, 142 papua, Hipposideros 10 papuae, Melanotaenia 243 papuanus, Pipistrellus 139 papuanus, Rhantus 185 papuensis, Archboldia 58 papuensis, Clupeoides 202 papuensis, Microperoryctes 193 papuensis, Otomops 13 papuensis, Spilocuscus 193 Papuexul 174 Papustyla 214 papyracea, Achatinella 188 Paracoelops 10 Paracoenia 250 Paracrocidura 241 Paracrocidura 7 Paracyclopia 92 Paracymus 249 Paradelma 60 Paradiaptomus 92 Paradigalla, Long-tailed 164 Paradigalla 164 Paradisaea 58, 164 PARADISAEIDAE 58, 164, 199 Paradise-flycatcher, Annobon 53 Paradise-flycatcher, Bedford's 160 Paradise-flycatcher, Blue 160 Paradise-flycatcher, Cerulean 50 Paradise-flycatcher, Japanese 160 Paradise-flycatcher, Rufous 160 Paradise-flycatcher, Seychelles 53 Paradise-kingfisher, Biak 154 Paradise-kingfisher, Little 198 paradisea, Grus 36 paradisea, Ornithoptera 244

Paradisefish, Ornate 132

paradiseus, Ptiloris 164 paradoxa, Vertigo 217 paradoxa, Carelia 189 paradoxa, Carinurella 90 Paradoxa 213 paradoxolophus, Rhinolophus 11 Paradoxornis 51, 160 paradoxura, Crocidura 7 Paradoxurus 18, 224 paradoxus, Cardiocranius 23 paradoxus, Reithrodontomys 145 paradoxus, Solenodon 5 Paraegista 213 parafragilior, Megalobulimus 126 Paragalaxias, Arthurs 77 Paragalaxias 77 Paragomphus 107 paraguiarti, Prognathochromis 184 Parahelicops 200 Parakeet, Antipodes 40 Parakeet, Black-fronted 181 Parakeet, Blue-chested 41 Parakeet, Carolina 180 Parakeet, Cuban 40 Parakeet, Derbyan 152 Parakeet, El Oro 41 Parakeet, Flame-winged 41 Parakeet, Golden 40 Parakeet, Golden-capped 40 Parakeet, Golden-plumed 41 Parakeet, Grey-cheeked 152 Parakeet, Hispaniolan 40 Parakeet, Horned 40 Parakeet, Intermediate 41 Parakeet, Mauritius 41 Parakeet, Newton's 181 Parakeet, Nicobar 152 Parakeet, Norfolk Island 40 Parakeet, Rajatea 180 Parakeet, Red-masked 152 Parakeet, Rose-headed 152 Parakeet, Rufous-fronted 40 Parakeet, Santa Marta 41 Parakeet, Slender-billed 152 Parakeet, Socorro 40 Parakeet, White-necked 41 Parakeet, Yellow-fronted 152 Paralabidochromis 85 Paralabrax 168 Paraleptomys 25 Paralucia 103 Parambassis 206 Paramelania 119 Paramelita 90 PARAMELITIDAE 90, 185 Paramesotriton 68 paramicrus, Nesophontes 177 Paramiella 212 Paramorariopsis 96 Paranaspides 90 Parantechinus 3 Parantica 104, 171, 244 Paranyctimene 136 Parapheidole 101 Paraphlebia 107

paraplagiostoma, Harpagochromis 184 Pararge 253 Parartemia 91 parasitica, Manica 100 parasitica, Pheidole 101 parasiticum, Tetramorium 102 PARASTACIDAE 95, 208 PARASTENOCARIDIDAE 133 paratactis, Scotorythra 186 Paratelmatobius 67, 243 Paratherina 78 Paratica 237 Paratilapia 244 Paravitrea 175 Paraxerus 22, 142 pardalis albescens, Leopardus 223 Pardalote, Forty-spotted 53 Pardalotus 53 Pardiglanis 203 pardinus, Lynx 16 Pardofelis 195 Pardosa 88 pardus japonensis, Panthera 223 pardus kotiya, Panthera 223 pardus melas, Panthera 223 pardus nimr, Panthera 223 pardus orientalis, Panthera 223 pardus panthera, Panthera 223 pardus saxicolor, Panthera 223 pardus tulliana, Panthera 224 Pareas 200 parens, Cettia 158 Paretroplus 85 pariae, Myioborus 56 PARIDAE 53, 161 Parides 105, 171, 208 parilis, Granulina 213 parina, Xenodacnis 163 parinacotensis, Orestias 205 parkeri, Chelodina 62 parkeri, Cylloepus 249 parkeri, Herpsilochmus 46 parkinsoni, Procellaria 30 parma, Macropus 135 Parmacella 127 PARMACELLIDAE 127 parnaguae, Megaxenops 45 Parnassian, Shepard's Clodius 253 Parnassian, Strohbeen's Clodius253 Parnassius 105, 253 paropius, Enterochromis 85 Paroreomyza 56, 163, 181 parorthostoma, Pyxichromis 185 Parosphromenus 88 Parotia, Wahnes's 58 Parotia 58 Parras, Perrito de 183 parreyssi, Belgrandiella 115 parrishi, Cambarus 93 Parrot, Olive-shouldered 151 Parrot, Alexandra's 41 Parrot, Black-lored 41 Parrot, Blue-bellied 41 Parrot, Blue-naped 41 Parrot, Blue-rumped 152 Parrot, Fuertes's 41 Parrot, Golden-shouldered 41

Paraphoxinus 73, 202

Parapinnixa 96

Parrot, Ground 242 Parrot, Hooded 152 Parrot, Maroon-fronted 41 Parrot, Mascarene 181 Parrot, Mauritius 181 Parrot, Mauritius Grey 180 Parrot, Night 41 Parrot, Orange-bellied 41 Parrot, Paradise 181 Parrot, Pesquet's 41 Parrot, Pileated 152 Parrot, Red-faced 41 Parrot, Rodrigues 181 Parrot, Rusty-faced 41 Parrot, Scarlet-chested 41 Parrot, Seychelles 181 Parrot, Superb 41 Parrot, Swift 41 Parrot, Thick-billed 41 Parrot, Turquoise 152 Parrot, Yellow-eared 41 Parrotbill, Black-breasted 51 Parrotbill, Black-browed 160 Parrotbill, Brown-winged 160 Parrotbill, Grey-hooded 51 Parrotbill, Maui 56 Parrotbill, Reed 160 Parrotbill, Rufous-headed 160 Parrotbill, Rusty-throated 51 Parrotbill, Short-tailed 51 Parrotbill, Spectacled 160 Parrotfinch, Green-faced 57 Parrotfinch, Pink-billed 57 Parrotfinch, Red-eared 57 Parrotfinch, Royal 57 Parrotfish, Rainbow 87 Parrotlet, Amazonian 152 Parrotlet, Brown-backed 41 Parrotlet, Golden-tailed 41 Parrotlet, Red-fronted 152 Parrotlet, Spot-winged 41 Parrotlet, Yellow-faced 40 parryii kodiacensis, Spermophilus 231 parryii lyratus, Spermophilus 231 parryii nebulicola, Spermophilus 231 parthenopaeum, Cymatium 173 parthenopaeum, Ranella 173 Partridge, Annam 34 Partridge, Black 149 Partridge, Buff-throated 149 Partridge, Chestnut-breasted 34 Partridge, Chestnut-headed 34 Partridge, Chestnut-necklaced 34 Partridge, Chestnut-throated 149 Partridge, Hainan 34 Partridge, Orange-necked 34 Partridge, Rusty-necklaced 149 Partridge, Sichuan 34 Partridge, Taiwan 149 Partridge, White-cheeked 149 Partridge, White-necklaced 34 Partula, Fat Guam 127 Partula, Mount Alifana 191 Partula, Radiolate 127 Partula, Sutural 239 Partula 127, 190, 191, 239 PARTULIDAE 127, 190, 215, 239 Partulina, Splendid 121

Partulina 121, 188, 213 PARULIDAE 55, 163 Paruromys 25 Parus 53, 161 parva, 'Nanocochlea' 256 parva, Cincinnatia 115 parva, Deinacrida 209 parva, Dubiraphia 249 parva, Melanotaenia 78 parva, Oecetis 254 parva, Pyrenaearia 175 parva, Viridonia 56 parvani orientalis, Proasellus 237 parviceps, Scortum 206 parvidens, Cheiromeles 139 parvidens, Cynomys 131 parvidens, Euroscaptor 8 parvidens, Hylogomphus 171 parvidens, Marmosops 135 parvidens, Mautodontha 189 parvipes, Nectomys 25 parvula, Jenkinsia 71 parvula, Microgale 5 parvula, Rhogeessa 139 parvula, Taheitia 212 parvulus, Medionidus 111 parvulus, Proasellus 97 parvulus, Somatogyrus 212 parvus, Burramys 4 parvus, Cherax 208 parvus, Clidomys 179 parvus, Galaxias 204 parvus, Hylomys 6 parvus, Hylomyscus 242 parvus, Margaretamys 24 parvus, Stygobromus 89 parvus, Thermocyclops 132 Paryphanta 175, 216 parzefalli, Mexistenasellus 97 pasadenas, Syncaris 185 Pask¾viza 73 paskai, Pseudomugil 205 Pasmaditta 216 pasonis, Ashmunella 175 PASSERIFORMES 45, 132, 155, 181, 198, 242, 246 Passerina 162 pastazae, Galbula 44 pastinator, Cacatua 152 patagonum, Dolichotis 145 paterculus, Pipistrellus 139 pathirana, Danio 72 patrius, Pseudomys 26 patrizii, Asellia 10 pattersoni, Trogloglanis 75 patula, Palaina 211 Pature, Papillon La 105 paucidens, Gulella 216 paucidentata, Alionycteris 8 paucispinus, Sebastes 82 PAUCITUBERCULATA 3 Paulamys 178 pauli, Bassaricyon 17 pauli, Lamnifera 123 pauliani, Afrocyclops 185 pauliani, Apaturopsis 253 pauliani, Otus 42

pauliani, Typhleotris 87 paulicoba, Palaemnema 108 paulinae, Liolaemus 199 paulistana, Zilchogyra 125 paulistus, Phylloscartes 47 paulsoni, Epigomphus 107 paulus, Crateromys 23 pauper, Camarhynchus 162 Pauraque, Jamaican 43 pauxi, Pauxi 34 Pauxi 34 Pavo 35 pawpela, Glacidorbis 209 paykullii, Porzana 150 peaci, Nothaldonis 248 Peaclam, Montane 256 Peacock-pheasant, Bornean 35 Peacock-pheasant, Bronze-tailed 149 Peacock-pheasant, Germain's 35 Peacock-pheasant, Malayan 35 Peacock-pheasant, Mountain 35 Peacock-pheasant, Palawan 35 Peafowl, Congo 34 Peafowl, Green 35 Pearlfish, Ginger 79 Pearlfish, Minute 79 Pearlfish, Opalescent 79 Pearlfish, Splendid 79 Pearlshell, Louisiana 110 Pearlymussel, Birdwing 111 Pearlymussel, Cracking 111 Pearlymussel, Curtis 255 Pearlymussel, Littlewing 111 Pearlymussel, Slabside 172 pearsei, Typhliasina 77 pearsoni, Solisorex 7 pearsoni, Uramphisopus 97 pearsoniana, Litoria 66 pearsonii, Belomys 142 Pebblesnail, Angular 211 Pebblesnail, Ash Meadows 211 Pebblesnail, Atlas 212 Pebblesnail, Cahaba 115 Pebblesnail, Channeled 212 Pebblesnail, Columbia 211 Pebblesnail, Coosa 212 Pebblesnail, Dwarf 212 Pebblesnail, Flat 116 Pebblesnail, Fluted 212 Pebblesnail, Goldend 211 Pebblesnail, Granite 212 Pebblesnail, Hidden 212 Pebblesnail, Knotty 212 Pebblesnail, Moapa 211 Pebblesnail, Moom 212 Pebblesnail, Mud 212 Pebblesnail, Oachita 211 Pebblesnail, Opaque 212 Pebblesnail, Ovate 212 Pebblesnail, Pahranagat 211 Pebblesnail, Pygmy 212 Pebblesnail, Quadrate 212 Pebblesnail, Rolling 212 Pebblesnail, Savannah 212 Pebblesnail, Sparrow 212 Pebblesnail, Stocky 212 Pebblesnail, Tallapoosa 212 Pebblesnail, Tennessee 212

Pebblesnail, Thick-lipped 212 Pebblesnail, Umbilicate 188 pecatonica, Acanthometropus 186 Peccary, Chacoan 20 pechumani, Tachysphex 170 pecki, Glyphyalinia 217 pecki, Procambarus 95 pecki, Stygobromus 90 pecos, Assiminea 114 pecos, Gammarus 90 pecosensis, Cyprinodon 79 pecosensis, Pyrgulopsis 211 pectardens, Luscinia 159 pectinata, Pristis 69 PECTINIDAE 209 pectoralis, Aphelocephala 50 pectoralis, Harpagochromis 184 pectoralis, Herpsilochmus 46 pectoralis, Heteromunia 163 pectoralis, Polystictus 156 pectorosa, Actinonaias 172 pedderensis, Galaxias 76 pedderensis, Romankenkius 192 pedderensis, Westriplectes 255 pedderi, Glacidorbis 209 pedester, Mycotrupes 250 Pedetes 27 PEDETIDAE 27 PEDIONOMIDAE 36 Pedionomus 36 pedo, Saga 109 Pedostibes 66 pedunculatus, Zyzomys 27 peeli, Microdillus 144 peelii mariensis, Maccullochella 236 pefauri, Telmatobius 201 PEGASIDAE 81, 205, 236 Pegasus 81, 205, 236 pege, Oravelia 251 Pegias 111 peguensis, Pipistrellus 194 pelagicus, Haliaeetus 33 pelagonicus, Chirocephalus 91 Pelargopsis 153 Pelea 131 PELECANIDAE 30 PELECANIFORMES 30, 146, 179, 198 Pelecanoides 30 PELECANOIDIDAE 30 Pelecanus 30 Pelecus 202 peled, Coregonus 204 pelengensis, Tarsius 194 pelerei, Belgrandiella 115 pelewana, Aaadonta 214 pelewensis, Hungerfordia 210 peli, Saccolaimus 136 Pelican, Dalmatian 30 Pelican, Spot-billed 30 pelii, Anomalurus 145 pellegrini, Rheocles 205 pellisserpentis, Scaevatula 213 Pellorneum 51 pellucida, Amastra 189 pellucidum, Etheostoma 83 pellucidus, Allocrangonyx 89 Pelobates 235

PELOBATIDAE 235 Pelochelys 66 Pelocoris 251 PELOMEDUSIDAE 64, 132, 200 Pelomys 25 peloponnesica, Platyla 210 peloponnesius, Barbus 202 peltastes, Cylindraspis 182 Peltocephalus 64 PELTOPERLIDAE 254 Peltophryne 66 Peltotrupes 250 pelurus, Rattus 26 Pelusios 65, 200 pelzelni, Aplonis 57 pelzelnii, Tachybaptus 29 pembae, Nectarinia 161 pembaensis, Otus 153 pembaensis, Treron 151 pembertoni, Peromyscus 178 penduliger, Cephalopterus 46 Pene 124 Penelope 34, 149 Penelopides 44, 154 Penescosta 123 Penguin, Erect-crested 29 Penguin, Fiordland 29 Penguin, Galápagos 29 Penguin, Humboldt 146 Penguin, Jackass 146 Penguin, Snares Islands 29 Penguin, Yellow-eyed 29 penicillata ogilbyi, Bettongia 219 penicillata penicillata, Bettongia 219 penicillata, Bettongia 129 penicillata, Petrogale 4 penicillatus, Eliurus 24 penicillatus, Medionidus 111 penicillatus, Pycnonotus 157 peninsularis, Myotis 12 penita, Dysnomia 255 penita, Epioblasma 110 pennata, Rhea 146 penningtoni, Capys 102 penningtoni, Lepidochrysops 103 penningtoni, Poecilmitis 103 pennsylvanicus chihuahuensis, Microtus 245 pennsylvanicus dukecampbelli, Microtus 232 pennsylvanicus kincaidi, Microtus 232 pentadactyla, Manis 142 Pentalagus 29 Pentarthrum 185, 248 pephredo, Lepidochrysops 103 Peponocephala 242 pequinius, Myotis 138 perahuensis, Opanara 123 peramata, Brookesia 59 PERAMELEMORPHIA 4, 177, 193, 219 Perameles 4, 177, 219 PERAMELIDAE 4, 177, 219 Perca 206 Percarina 84 Perch, Balkhash 206 Perch, Balston's Pygmy 206 Perch, Macquarie 206

Perch, Oxleyan Pygmy 82 Perch, Russian River Tule 247 Perch, Silver 83 Perch, Variagated Pygmy 82 Perch, Yarra Pygmy 82 Perchlet, Agassiz's 206 Perchlet, High-Finned Glass 206 Perchlet, Kokoda Glass 206 Perchlet, Yellow-Fin 244 PERCICHTHYIDAE 82, 206, 236 Percichthys 206 PERCIDAE 83, 169, 184, 206, 247 PERCIFORMES 82, 132, 168, 184, 206, 236, 244, 247 Percilia 206 Percilla 206 Percina 84, 169 percivali, Cloeotis 136 percnurus, Phoxinus 203 percoi, Moserius 97 percoides, Prognathochromis 184 PERCOPSIFORMES 77 Perdicella 121, 188, 213 Perdicula 35 perdita, Hirundo 48 Perdita 251 perdix, Partulina 121 peregrina, Polygyra 175 peregusna peregusna, Vormela 224 perexilis, Campolaemus 192 perfuscus, Liophis 61 pergandei, Monomorium 101 pergrisea, Crocidura 7 Pericrocotus 157 periglenes, Bufo 66 perijae, Gracilinanus 193 perijana, Schizoeaca 155 peringueyi, Ecchlorolestes 108 peringueyi, Opsaridium 73 peringueyi, Phyllodactylus 199 periosus, Choeroniscus 11 PERIPATIDAE 109, 171, 209 Peripatoides 109 PERIPATOPSIDAE 109, 187, 255 Peripatopsis 109, 187 periscelis, Carelia 189 Perisoreus 58 PERISSODACTYLA 19, 130, 141, 178, 225, 242 perjurus, Eidoleon 254 perkensi, Oceanides 251 perkins, Nesomimesa 251 perkinsi, Machiloides 254 perkinsi, Newcombia 121 PERLIDAE 254 perlonga, Lyropupa 191 perlucida, Dupontia 124 permixtus, Pipistrellus 194 Pernagera 123 pernanus, Mastomys 24 pernix, Myiotheretes 47 perobesus, Bothriembryon 121 Perognathus 23, 142, 232, 242 peromyscus, Praomys 197 Peromyscus 26, 144, 178, 233, 242 peronii, Charadrius 150 peronii, Dobsonia 8

peronii, Lissodelphis 195 peronii, Zoothera 161 Peroryctes 193 PERORYCTIDAE 193 perotensis, Spermophilus 142 perotteti, Pristis 69 perovalis, Lampsilis 172 perovatum, Pleurobema 112 perpallidus, Notropis 168 perplexa, Tischeria 186 perplexus, Amphicyclotulus 117 perpurpurea, Villosa 256 perpusilla, Auriculella 213 perrieri, Prognathochromis 185 perroquini, Heterocyclus 116 perrugosa, Panulena 190 persephone, Aeshna 105 persephone, Betta 88 persephone, Petrogale 4 persephone, Rhadine 248 persicus, Acipenser 235 persicus, Acipenser 70 persicus, Batrachuperus 68 persoluta, Pseudocampylaea 190 personata orientalis, Melogale 224 personata, Dysnomia 187 personata, Epioblasma 110 personata, Heliopais 37 personata, Prosopeia 152 personata, Rhipidura 160 personatus barbarabrownae, Callicebus 221 personatus maritimus, Geomys 231 personatus melanochir, Callicebus 221 personatus nigrifrons, Callicebus 221 personatus personatus, Callicebus 221 personatus streckeri, Geomys 231 personatus, Callicebus 14 personatus, Myomimus 28 perspicax, Penelope 34 perspicillata, Lutra 17 perspicillata, Malacocincla 51 perspicillatus, Phalacrocorax 179 pertricosa, Dipnelix 214 peruncus, Orconectes 94 peruviana, Grallaricula 155 peruviana, Tangara 55 peruviana, Vini 41 peruvianus, Mesoplodon 196 peruvianus, Telmatobius 201 peruviensis, Neusticomys 25 pesi, Pseudochromis 83 pestai, Capoeta 167 Petalura 107 PETALURIDAE 107 Petasina 215 petasus, Armsia 121 PETAURIDAE 5, 135, 220 Petaurista 142 Petaurus 5, 135, 220 petersi, Morenia 166 petersi, Rhynchocyon 29 petersoni, Mops 139 petilicarpus, Fallicambarus 94 petilus, Hobbseus 94 Petinomys 142

petiti, Astacoides 95

petiti, Cottus 82 petiti, Glyptophysa 113 petiti, Heterocyclus 116 petiti, Paretroplus 85 petkovskii, Stygodiaptomus 92 Petrel, Atlantic 30 Petrel, Barau's 30 Petrel, Beck's 30 Petrel, Bermuda 30 Petrel, Black 30 Petrel, Black-capped 30 Petrel, Chatham Islands 30 Petrel, Cook's 30 Petrel, Defilippe's 30 Petrel, Fea's 30 Petrel, Fiji 30 Petrel, Galápagos 30 Petrel, Hawaiian 30 Petrel, Jamaica 30 Petrel, Magenta 30 Petrel, Mascarene Black 30 Petrel, Providence 30 Petrel, Pycroft's 30 Petrel, Westland 30 Petrel, White-necked 30 Petrel, Zino's 30 Petrochroa 252 Petrodromus 245 Petrogale 4, 135, 220, 241 Petroica 51, 199 Petromyscus 26, 144 PETROMYZONTIDAE 69, 167, 183, 201, 246 PETROMYZONTIFORMES 69, 167, 183, 201, 246 petropolitana, Thoropa 67 Petropsaro 71 petterdi, Angrobia 114 petterdi, Beddomeia 114 peucetia penningtoni, Orniphalidotos 252 Pewee, Ochraceous 156 Pezophaps 180 Pezoporus 242 pfefferi, Calamaria 200 pfeifferi, Bythiospeum 115 pfeifferi, Diplodon 110 pfeifferi, Newcombia 121 Phacellodomus 155 Phacochoerus 226 Phaenicophaeus 42 Phaenomys 26 phaeocephalus, Pteropus 9 Phaeognathus 68 phaeopygia, Pterodroma 30 phaeosoma, Melamprosops 56 phaeozona, Achatinella 120 Phaethornis 153 phaeura, Chimarrogale 6 phaeura, Crocidura 7 phaeurus, Carpomys 197 phaeus, Optioservus 249 phainopeplus, Campylopterus 153 phalacris, Triaenodes 187 PHALACROCORACIDAE 31, 147, 179, Phalacrocorax 31, 147, 179, 198 Phalanger, Bear 193

Phalanger 4, 193, 219, 241 PHALANGERIDAE 4, 193, 219, 241 PHALANGODIDAE 88 Phalanta 253 Phalcoboenus 149 Phallodrilus 110 PHALLOSTETHIDAE 79 Phallostethus 79 Phaner 139, 220 Phapitreron 39 Phaps 151 Pharomachrus 153 Pharatic 13 pharyngomylus, Labrochromis 184 Phascogale, Brush-tailed 219 Phascogale, Brush-tailed 135, 219 Phascogale, Red-tailed 3 Phascogale 3, 135, 219 PHASCOLARCTIDAE 135 Phascolarctos 135 Phascolosorex 193 phasianella, Beddomeia 114 PHASIANIDAE 34, 149, 180, 198 Phasis 103, 252 PHASMATIDAE 187 PHASMATOPTERA 187 Phasmodes 109 Phaulomys 26 phayrei, Trachypithecus 194 Pheasant, Bulwer's 35 Pheasant, Cheer 34 Pheasant, Copper 149 Pheasant, Edwards's 35 Pheasant, Elliot's 35 Pheasant, Golden 149 Pheasant, Hume's 35 Pheasant, Imperial 35 Pheasant, Lady Amherst's 149 Pheasant, Mikado 149 Pheasant, Reeves's 35 Pheasant, Salvadori's 35 Pheasant, Sumatran 35 Pheasant, Swinhoe's 149 Pheasant, Vietnamese 35 Phegornis 150 Pheidole 101 Phelsuma 59, 165, 182 Phenacobius 73 Phenacolimax 245 phenax, Hexolobodon 179 phenosa, Ochrotrichia 254 pheronyx, Aquadulcaris 90 Phibalura 156 philander, Caluromys 135 Philanthus 251 Phildoria 252 Philemon 162, 199 Philepitta 157 PHILEPITTIDAE 47, 157 Philesturnus 132 philiberti, Phalanta 253 philippae, Sylvietta 160 philippeni, Ocadia 200 philippensis, Bubo 42 philippensis, Pelecanus 30 philippensis, Spizaetus 33 philippensis, Sturnus 164

philippensis, Sus 141 philippiana, Newcombia 188 philippii, Arctocephalus 17 philippinensis, Rhinolophus 137 philippinica, Succinea 217 phillipsi, Garra 202 phillipsi, Tangara 163 phillipsii, Dipodomys 142 philo, Parantica 104 Philocasca 255 Philodice 153 Philodryas 200 Philonesia 125 PHILOPOTAMIDAE 255 PHILORHEITHRIDAE 255 Philoria 67 philarites, Acalyphes 252 Philotiella 252 Philydor 45, 155 philyrina, Caldwellia 190 phlegethon, Pseudobarbus 73 phlegethontis, Iotichthys 72 phleophaga, Ectodemia 186 Phloeomys 26, 144 Phlogophilus 153 Phoboscincus 200 Phoca 17, 140, 224, 242 phocaenoides, Neophocaena 225 phocaenoides, Neophocaena 196 Phocarctos 17 PHOCIDAE 17, 140, 178, 224, 242 phocoena, Phocoena 225 phocoena, Phocoena 18 Phocoena 18, 196, 225 PHOCOENIDAE 18, 129, 196, 225 Phocoenoides 129 Phodilus 42 Phoebetria 146 phoedon, Amauris 104 PHOENICOPTERIDAE 31, 147 Phoenicopterus 31, 147 Phoenicurus 160 PHOLIDOTA 142 phorbanta nana, Papilio 253 phorbanta, Papilio 105 phosphor borealis, Bowkeria 252 phosphor phosphor, Bowkeria 252 photophila, Agrotis 186 Photuris 249 Phoxinellus 73, 168, 203, 236 phoxinus, Chondrostoma 202 Phoxinus 73, 168, 203 PHOXOCEPHALIDAE 90 Phrantela 116, 211, 256 Phreatichthys 73 Phreatobius 204 Phreatodrobia 116 PHREATOICIDAE 97, 247 phreatophila, Prietella 75 phrudus, Mormopterus 13 phrygia, Xanthomyza 54 Phrynomedusa 201 Phrynops 62, 165 Phrynosoma 246 phthinotropis, Bellamya 120 Phyciodes 253 Phycodorus 205

phyle, Parantica 104 Phyllastrephus 48, 157 phyllocercus, Engaeus 96 Phyllococcus 186 Phyllodactylus 59, 165, 199 phyllodes, Marmolyce 248 Phyllodesma 102 Phyllodiaptomus 92 Phyllomyias 156 Phyllonycteris 11, 137, 177 Phyllops 137 Phyllopteryx 205 Phylloscartes 47, 156 Phylloscopus 51, 160 phyllostegiae, Cyrtopeltis 251 PHYLLOSTOMIDAE 11, 137, 177, 194 Phyllostomus 137 Phyllotis 144 Phylolestes 108 Physa, Cave 113 Physa, Fish Lake 113 physa, Partulina 121 Physa, Utah 113 Physa, Wet Rock 113 physalipus, Neodiaptomus 92 physalus, Balaenoptera 18 Physella 113, 210 Physeter 18 PHYSETERIDAE 18, 242 Physiculus 77 PHYSIDAE 113, 210 phytophagus, Xystichromis 86 Phytotoma 47 PHYTOTOMIDAE 47 piacentinii, Madoqua 21 picardi, Trochoidea 190 Picathartes 51, 52 picatus, Chalinolobus 137 picea, Crocidura 7 piceata, Astatotilapia 84 piceus, Colymbetes 248 piceus, Unas 248 pichiy, Zaedyus 193 PICIDAE 44, 154, 18I PICIFORMES 44, 154, 181 pickeringii, Ducula 39 pickersgilli, Hyperolius 66 Picoides 45 picta, Anguispira 214 picta, Grantiella 54 picta, Leptoxis 118 picta, Omphalotropis 210 picticaudata, Procapra 141 pictum, Pachychilon 168 pictus, Chrysolophus 149 pictus, Echimys 146 pictus, Isothrix 197 pictus, Lycaon 16 pictus, Neacomys 144 pictus, Procambarus 95 Piculet, Antillean 155 Piculet, Fine-barred 155 Piculet, Mottled 155 Piculet, Ochraceous 45 Piculet, Speckle-chested 155 Piculet, Tawny 45 Piculus 155

Picumnus 45, 155 Picus 45 pidschian, Coregonus 204 Pied-babbler, Hinde's 53 Pied-Hornbill, Malabar 154 Piedtail, Ecuadorian 153 Piedtail, Peruvian 153 PIERIDAE 253 Pieris 253 Pig, Javan Warty 20 Pig, Palawan Bearded 226 Pig, Philippine Warty 141 Pig, Ryukyu Islands Wild 226 Pig, Vietnam Warty 178 Pig, Visayan Warty 20 Pig, Western Bearded 226 Pigeon, Bonin Wood 180 Pigeon, Chilean 151 Pigeon, Choiseul 180 Pigeon, Dark-tailed Laurel 38 Pigeon, Madeira Laurel 132 Pigeon, Maroon 38 Pigeon, Mauritius Blue 180 Pigeon, Nicobar 150 Pigeon, Pale-backed 38 Pigeon, Pale-capped 38 Pigeon, Partridge 151 Pigeon, Passenger 180 Pigeon, Peruvian 38 Pigeon, Pink 38 Pigeon, Plain 38 Pigeon, Ring-tailed 38 Pigeon, Rodrigues 180 Pigeon, Ryukyu 180 Pigeon, Somali 38 Pigeon, Sombre 151 Pigeon, Tooth-billed 38 Pigeon, White-naped 151 Pigeon, White-tailed Laurel 38 Pigeon, Yellow-legged 38 pigra, Alouatta 241 Pigtoe, Atlantic 111 Pigtoe, Cumberland 111 Pigtoe, Dark 111 Pigtoe, Fine-rayed 111 Pigtoe, Flat 112 Pigtoe, Heavy 112 Pigtoe, Narrow 111 Pigtoe, Oval 172 Pigtoe, Pyramid 172 Pigtoe, Rough 112 Pigtoe, Shiny 111 Pigtoe, Southern 111 Pigtoe, True 112 Pigtoe, Warrior 112 pigus, Rutilus 203 Piha, Cinnamon-vented 46 pihapiha, Ponapella 210 Pika, Forrest's 146 Pika, Gaoligong 197 Pika, Helan Shan 28 Pika, Ili 28 Pika, Koslov's 28 Pika. Muli 197 Pika, Nubra 242 Pika, Sardinian 179 Pika, Steppe 28 Pika, Thomas' 146

pikoensis, Holcobius 248 Pipreola 156 planiceps, Myotis 177 Pila 114, 173 PIPRIDAE 47, 156 planiceps, Prionailurus 16 pileata, Penelope 149 Piprites, Grev-headed 156 planifrons, Hippocampus 81 pileata, Pionopsitta 152 Piprites 47, 156 planifrons, Hyperoodon 130 pileatus, Herpsilochmus 155 Pirarucu 202 Planigale, Papuan 3 pileatus, Hylobates 16 piratarum, Succinea 128 Planigale 3 pileatus, Piprites 47 pirrensis, Isthmomys 143 planilabrum, Partula 191 pileatus, Trachypithecus 15 pisarskii, Strongylognathus 102 Planilaoma 214 PISAURIDAE 88 pilikia, Kubaryia 210 Planorbella 113 pilligaensis, Pseudomys 26 pisciculus, Cheirodon 203 PLANORBIDAE 113, 173, 187, 210, 256 piscivora, Osbornictis 195 Pillomena 174 planospira, Sinployea 190 Pilon, Sardinita del 73 PISIDIIDAE 256 plantarius, Dolomedes 88 Pisidium 256 pilosa, Omphalotropis 210 Plantcutter, Peruvian 47 Pisidium 173, 256 pilosus, Dasypus 5 Planthopper, Barber's Point 251 pisteri, Pyrgulopsis 211 pilosus, Hydrotarsus 98 Planthopper, Bridewell's 251 pitcairnensis, Philonesia 125 Planthopper, Diamond Head 251 pilosus, Pteropus 177 pitcairnensis, Sinployea 123 Planthopper, Glenwood 251 pilsbryanus, Somatogyrus 212 Pilsbrycharopa 123 Pithecheir 144 Planthopper, Iao Valley 251 pilsbryi, Carelia 189 Pithecia 222, 241 Planthopper, Kauai Parti-coloured251 Planthopper, Keanae 251 pilsbryi, Elimia 117 Pithecophaga 33 Pithys 198 Planthopper, Kusche's 251 pilsbryi, Stenotrema 215 Planthopper, Lanai 251 pitmani, Crocidura 7 Pilula 123 Pitta, Azure-breasted 47 Planthopper, Lihue 251 pimanensis, Melanotaenia 205 Pitta, Bar-bellied 156 Planthopper, Long-footed 251 pimatuae, Craterocephalus 204 Planthopper, Mt Tantalus Shortwing Fern Pitta, Black-faced 47 Pimelodella 204 Pitta, Blue-headed 156 PIMELODIDAE 76, 204 Planthopper, Nahiku 251 Pitta, Blue-naped 156 Pimpleback, Orangefoot 111 Planthopper, Wild Cotton 251 Pitta, Blue-rumped 157 pinaleno, Eumorsea 108 plantii, Gulella 245 Pitta, Fairy 47 Pinaroloxias 55 planulata, Hirasea 190 Pitta, Giant 156 pinchaque, Tapirus 19 Platalea 31 Pitta, Gurney's 47 Pindu 86 Pitta, Mangrove 156 Platalina 11 pindu, Stomatepia 86 Pitta, Schneider's 47 Platanista 19 pinetis cumberlandius, Geomys 231 PLATANISTIDAE 19, 196 Pitta, Sula 156 pinetis fontanelus, Geomys 231 Pitta, Superb 47 Platanna, Cape 67 pinetis goffi, Geomys 231 platenae, Ficedula 50 Pitta, Whiskered 47 Pingalla 169, 244 Pitta 47, 156, 157 platenae, Gallicolumba 39 pinguis, Cyclura 60 PITTIDAE 47, 156 platenae, Prioniturus 41 Pink, Ring 111 pittieri, Ichthyomys 24 plateni, Aramidopsis 36 PINNOTHERIDAE 96 plateni, Stachyris 160 Pittoconcha 125 Pinto, Guayacon 168 pittoides, Atelornis 154 platorynchus, Scaphirhynchus 70 Pionopsitta 152 pittospori, Karocolens 248 platycephalus, Euproctus 68 Piopio 181 plutycephalus, Salmo 77 Pityriasis 157 Pipefish, Banded 205 pityusensis, Podarcis 60 platycheilus, Palaina 211 Pipefish, Double-ended 205 piurae, Ochthoeca 156 PLATYCNEMIDAE 238 Pipefish, River 82 PLATYCNEMIDIDAE 108, 209 pizarro, Parides 208 Pipefish, Slender 205 pizzinii, Stygobromus 90 Platycnemis 108 Pipefish, Spinach 205 placens, Poecilodryas 199 PLATYCOPIIDAE 92 Pipehorse 82 Platyla 113, 210 placeonovitas, Cipangochalax 213 Pipehorse, Duncker's 82 Platymantis 67 placidus, Charadrius 150 Pipehorse, Gunther's 82 Platynectes 249 placidus, Noturus 168 Pipehorse, Robust 82 placidus, Sosippus 88 platynota, Geochelone 65 Pipehorse, Spiny 82 platynota, Notochelys 200 Placostylus 121, 126, 127, 190, 239 piperata, Litoria 66 platyops, Eptesicus 12 Plagigeyeria 116 PIPIDAE 67 platyops, Potorous 177 Plagiodontia 28, 179 pipile, Pipile 34 Platyops 97 Plagiolepis 101 Pipile 34 Platyrinchus 47 plagiostoma, Harpagochromis 85 Piping-guan, Black-fronted 34 Platyrrhinus 11, 137 Piping-guan, Trinidad 34 plagiota, Hypena 186 Pipistrellus 13, 139, 194 Plagopterus 73 Platysaurus 165 platysayoides, Triodopsis 215 Pipit, Chaco 157 Plains-wanderer 36 Platysmurus 164 Planaeschna 237 Pipit, Malindi 157 Planarian, Biggers' Groundwater 256 Platysteira 52, 160 Pipit, Mountain 157 PLATYSTERNIDAE 200 Planarian, Holsinger's Groundwater256 Pipit, Ochre-breasted 48 Platysternon 200 Planarian, Lake Pedder 192 Pipit, Sokoke 48 Planarian, Malheur Cave 256 PLATYSTICTIDAE 108 Pipit, Yellow-breasted 48 planeri, Lampetra 167 Platytaeniodus 184 pipra, Iodopleura 46 Pipra 47, 156 planicauda, Pyxis 65 platyura, Schoenicola 160

plebejus, Barbus 167 Plebejus 252 PLECOGLOSSIDAE 236 Plecoglossus 236 PLECOPTERA 109, 187, 209, 254 Plecotus 13 Plectranthias 83 PLECTROTARSIDAE 255 Plegma 124 pleione, Taudactylus 67 Plentusia 174 plenum, Pleurobema 112 Plerotes 9 Plethobasus 111, 172 plethodon, Monophyllus 137 Plethodon 68, 167, 201 PLETHODONTIDAE 68, 167, 201 Pleurobema 111, 112, 172 pleurobipunctatus, Phoxinellus 168 Pleurocera 118 PLEUROCERIDAE 117, 188, 212 Pleurodonte 189 Pleurodytes 249 Pleuronectes 88 PLEURONECTIDAE 88 PLEURONECTIFORMES 88 Pleuropoma 238 pleurotaenia, Puntius 132 pleurotoma, Paladilhia 116 Pleuroxia 122, 174 PLEXAURIDAE 128 plicaria, Hemicycla 245 plicata, Leptoxis 118 Plicatoperipatus 171 plicifera, Nesopupa 216 plicosa, Omphalotropis 187 PLOCEIDAE 57, 164, 182, 199 Ploceus 57, 164, 199 PLOTOSIDAE 76, 247 Plover, Hooded 37 Plover, Javan 150 Plover, Long-billed 150 Plover, Madagascar 37 Plover, Magellanic 150 Plover, Malaysian 150 Plover, Mountain 37 Plover, Piping 37 Plover, Shore 37 Plover, St Helena 37 plumbea, Leucopternis 148 plumbeus, Carcharhinus 69 plumbeus, Dysithamnus 45 plumbeus, Micrastur 34 plumimanus, Procambarus 95 pluto, Chalicodoma 208 Pluvianellus 150 Pnoepyga 160 Poblana 78, 205 pocahontas, Doronomyrmex 100 Pochard, Baer's 32 Pochard, Madagascar 32 Pocketbook, Fat 112 Pocketbook, Fine-lined 111 Pocketbook, Lined 111 Pocketbook, Ouachita Rock 110 Pocketbook, Shinyrayed 255 Pocketbook, Speckled 111

Podarcis 60, 246 PODARGIDAE 153, 198 Podiceps 29, 146, 179 PODICIPEDIDAE 29, 146, 179 PODICIPEDIFORMES 29, 146, 179 Podilymbus 179 Podismopsis 254 Podoces 58 Podocnemis 65, 132 PODOCOPIDA 97, 185 Podogymnura 6 Podomys 26 Podoxymys 144 Poecilia 80, 205 POECILIIDAE 80, 168, 184, 205, 236 Poeciliopsis 168, 205, 236 Poecilmitis 103, 170, 208, 252 Poecilodryas 199 poecilonotus, Takifugu 207 poecilops miyajimaense, Orthetrum 238 poecilops, Gerbillus 143 poecilopterus, Nesoclopeus 180 poecilorrhoa, Cryptophaps 151 poecilotis, Chrysomma 158 Poecilotriccus 156 poensis, Chalinolobus 138 poeyi, Phyllonycteris 137 pogonias pogonias, Cercopithecus 222 Pogonichthys 73, 183 Pogoniulus 44 Pogonomelomys 26 Pogonomyrmex 101 Pogonomys 26 pogum, Procambarus 95 pohlei, Pteropus 9 Poiana 224 poiciloptilus, Botaurus 31 Polecat, European Marbled 224 polia, Crocidura 7 Polihierax 149 poliocephalus, Phyllastrephus 157 poliocephalus, Trachypithecus 15 Poliocephalus 29 poliocerca, Eupherusa 43 poliogaster, Accipiter 148 poliolophus, Batrachostomus 198 poliolophus, Prionops 49 polionota, Leucopternis 148 polionotus allophrys, Peromyscus 233 polionotus ammobates, Peromyscus polionotus decoloratus, Peromyscus 233 polionotus leucocephalus, Peromyscus polionotus niveiventris, Peromyscus polionotus peninsularis, Peromyscus 233 polionotus phasma, Peromyscus 233 polionotus trissyllepsis, Peromyscus 233 poliopareia, Estrilda 57 Polioptila 160 polita, Mandarina 214 polius, Peromyscus 26 polleni, Paratilapia 244

polleni, Xenopirostris 49 pollenii, Columba 151 polli, Congosorex 6 polli, Oxylapia 85 polops, Ameiva 61 Polposipus 99 polulus, Sudisorex 8 Polyborus 179 POLYCENTROPODIDAE 255 POLYCHAETA 110, 209 polychromaticum, Enallagma 208 polyctena, Formica 170 Polyergus 101 Polygyra 175 POLYGYRIDAE 127, 175, 215, 239 Polygyriscus 215 polykomos, Colobus 140 Polylamina 250 polylepis, Anabarilius 71 polylepis, Leuciscus 72 polymorpha, Pseudopalaina 211 polyodon, Helenoconcha 189 Polyodon 70 POLYODONTIDAE 70 Polyommatus 103 Polyonymus 153 polyphemi, Onthophagus 250 polyphemus, Gopherus 65 polyphemus, Limulus 171 Polyphylla 250 Polyplectron 35, 149 POLYPRIONIDAE 82 Polysticta 32 Polystictus 156 Polytelis 41 POMACANTHIDAE 84 POMACENTRIDAE 86 Pomareo 52 Pomatias 244 POMATIASIDAE 118, 188, 212, 244 POMATIOPSIDAE 118, 188 Pomatoschistus 206 pomo, Arborimus 197 pomona, Hipposideros 194 Ponapella 210 ponapensis, Dendrotrochus 215 ponapensis, Tornatellinops 213 ponapica, Nesopupa 217 ponapicus, Palikirus 214 poncebensis, Pyrenaearia 175 ponceleti, Solomys 27 ponceleti, Tribolonotus 200 Pond-heron, Madagascar 147 ponderosa, Cincinnatia 115 ponderosa, Mandarina 214 Pondsnail, Thickshell 113 Pongo 16 ponsonbyi, Bridouxiana 119 pontica, Alosa 202 pontica, Vipera 62 Ponticyclops 132 Pontinus 82 Pontoporia 196 Poo-uli 56 Poolfish, Pahrump 247 Poolfish, Pahrump Ranch 247 Poolfish, Raycraft Ranch 247

Poorwill, Choco 153 Poorwill, Eared 153 Poorwill, Least 153 Poospiza 55, 163 popeii, Popenaias 112 Popelairia 198 Popenaias 112 poptae, Xenopoecilus 81 Porbeagle 69 porcata, Westraltrachia 122 porcellana, Partulina 213 porcellanus, Hippopus 133 porcinus annamiticus, Axis 226 porcinus porcinus, Axis 226 Porcupine, Crested 145 Porcupine, Thin-spined 28 porcus, Amastra 189 Porgy, Red 84 Poropuntius 73 porosus, Crocodylus 242 porphyretica, Limnocythere 98 Porphyrio 36, 180 porphyrocephala, Iridosornis 162 porphyrocheila, Leucocharis 190 porphyrolaema, Porphyrolaema 156 Porphyrolaema 156 Porphyrospiza 163 porphyrostomus, Placostylus 127 Porpoise, Burmeister's 196 Porpoise, Dall's 129 Porpoise, Finless 196, 225 Porpoise, Harbour 18, 225 Porpoise, Spectacled 196 porrecta, Elimia 117 porrectus, Helicarion 125 portoricensis, Isolobodon 28 portosanctana, Pseudocampylaea 174 Porzana 36, 150, 180 poseidon, Lepidochrysops 103 Posorites 174 Possum, Common Brushtail 219 Possum, Daintree River Ringtail 135 Possum, Green Ringtail 135 Possum, Herbert River Ringtail 135 Possum, Leadbeater's 5 Possum, Lemuroid Ringtail 135 Possum, Scaly-tailed 135 postelli, Pleurocera 118 Posticobia 188 postojnae, Metacyclops 92 postvectis, Galaxias 76 Potamilus 112 Potamogale 5 POTAMONAUTIDAE 96 Potamonectes 249 Potamonectes 249 Potamopyrgus 173 potenziani, Presbytis 15 POTERIIDAE 212 POTOROIDAE 4, 129, 135, 177, 219 Potoroo, Broad-faced 177 Potoroo, Gilbert's 4 Potoroo, Long-footed 4 Potoroo, Long-nosed 219 Potorous 4, 177, 219 Potosi, Cachorrito Enano de 183 Potosi, Perrito de 183

Potto, Golden 139 pottsi, Etheostoma 83 potulentus, Stylurus 107 pouchet, Hemicycla 125 poulsoni, Speoplatyrhinus 77 powellensis, Hemiboeckella 91 powellii, Lampsilis 111 Powelliphanta 175 poweri, Dupontia 124 poyntoni, Cacosternum 201 praecelcus, Bothriembryon 121 praeclara, Bridouxiana 119 praeclarus, Joiceya 103 praeconis, Pseudomys 26 praecox, Melanotaenia 205 praecox, Mordacia 69 praecox, Thamnophilus 155 praedatrix, Dobsonia 136 praerosa, Leptoxis 118 praetumida, Pilula 123 Praomys 26, 144, 197 pratensis/nigricans, Formica 170 Pratincole, Black-winged 150 pratti, Hipposideros 136 prattorum, Rhynchomeles 193 prattorum, Troides 105 Preciosa, Charal de la 78 prehensilis, Antriscopia 92 Premnoplex 45 Presa, Cachorrito de la 183 Presbytis 15, 140, 194 prespensis, Barbus 71 prespensis, Chondrostoma 167 pretiosa, Catocala 253 pretneri, Pseudocandona 98 pretrei, Amazona 40 preussi insularis, Cercopithecus 222 preussi preussi, Cercopithecus 222 preussi, Cercopithecus 15 prevostii, Euryceros 157 Priapella 184 pricei, Craterodiscus 173 pricei, Ictalurus 75 Prietella 75 prigoginei, Caprimulgus 43 prigoginei, Chlorocichla 48 prigoginei, Nectarinia 242 prigoginei, Phodilus 42 PRIMATES 13, 129, 139, 194, 220, 241, 245 primosi, Colophon 99 primum, Cristilabrum 122 princeps goldmani, Ochotona 233 princeps lasalensis, Ochotona 233 princeps nevadensis, Ochotona 233 princeps nigrescens, Ochatona 233 princeps obscura, Ochatona 233 princeps sheltoni, Ochotona 233 princeps tutelata, Ochotona 233 princeps, Accipiter 148 princeps, Cottus 206 princeps, Melidectes 54 principalis, Campephilus 181 principensis, Muricopsis 213 principula, Microgale 5 principulus, Gerbillus 24 pringlei, Aloeides 102

pringlei, Lepidochrysops 103 pringlei, Phasis 103 pringlei, Thestor 104 Prinia, Grey-crowned 160 Prinia, River 199 Prinia, Rufous-vented 52 Prinia, White-eyed 52 Prinia 52, 160, 199 priocephalus, Pycnonotus 157 Priodontes 5 Priolepis 169 Prionailurus 16, 140, 195, 224 Prioniturus 41, 152 Prionodura 132 Prionomys 144 Prionops 49 prionura, Mycteroperca 83 Priotelus 153 prisca, Lyropupa 216 Pristidactylus 199 PRISTIDAE 69 PRISTIFORMES 69 pristinus, Cambarus 93 pristis, Pristis 70 Pristis 69, 70 Pristoceuthophilus 254 pritchardi, Chelodina 62 pritchardiae, Stenotrupis 248 pritchardias, Pentarthrum 248 pritchardii, Megapodius 34 Proasellus 97, 237 Probarbus 73, 203 Problema 252 problematica, Rhophodon 214 PROBOSCIDEA 19 proboscideus, Macroscelides 29 Probosciger 152 Procambarus 94, 95, 237 Procapra 21, 141 PROCARIDIDAE 96 Procaris 96 PROCAVIIDAE 19, 226 Procellaria 30 PROCELLARIIDAE 30, 146, 179 PROCELLARIIFORMES 29, 146, 179, procellaris, Agrotis 186 procles, Graphium 105 proclivis, Megalobulimus 126 Procnias 46, 156 Procolobus 140, 222, 223, 245 Procyon 17, 178 PROCYONIDAE 17, 140, 178, 195 Prodontria 99 producta, Amphorella 124 producta, Elliptio 172 producta, Partula 191 productus, Hydroporus 248 productus, Nestor 181 Proechimys 146 Proedromys 144 Profelis 241 proformicarum, Rossomrymex 101 profundicola, Oryzias 81 profundispira, Hirasea 214 prognatha, Telmatherina 79 Prognathochromis 85, 184, 185

prognathus, Prognathochromis 185 Progne 198 Progomphus 107 Prolagus 179 prolatus, Bunomys 23 prolatus, Encheloclarias 76 proletaria, Dupontia 190 Pronesopupa 216 Pronghorn, Baja California 227 Pronghorn, Mexican 227 Pronghorn, Sonoran 227 pronoti, Mecistogaster 108 propinqua, Dysnomia 187 propingua, Epioblasma 111 Propithecus 14, 221 proprium, Dicaeum 53 Prosciurillus 22, 142 proserpina, Cyprinella 71 proserpina, Proserpinus 208 Proserpinus 208 Prosobonia 38, 180 Prosopeia 152 PROSORHOCHMIDAE 128, 175, 217 prospera, Mesonerilla 110 protea, Partula 191 PROTEIDAE 68 Proteles 224 Protemblemaria 87 Proteus 68 Protocobitis 74 Protomognathus 101 Protoploea 171 Protoptila 254 Prototrachia 122 Prototroctes 76, 183 protracta, Partula 191 protuberata, Beddomeia 115 provancheri, Formicoxenus 100 providencianus, Hypoplectrus 83 provocator, Xanthotis 162 provocax, Lutra 17 provosti, Ochrotrichia 254 proxima, Partulina 121 proxima, Sinployea 190 pruinosus, Myotis 12 Prunella 158 prunellei, Coeligena 43 PRUNELLIDAE 158 pryeri, Megalurus 51 Prymnbriareus 244 przewalskii, Eguus 178 przewalskii, Paradoxornis 51 przewalskii, Procapra 21 Psacadonotus 109 Psalidoprocne 157 PSAMMASPIDIDAE 90 Psammobates 65 Psammochromis 85, 185 psammophila, Sminthopsis 4 psarolena, Solatopupa 174 pselaphon, Pteropus 9 Pselliophorus 55 PSEPHENIDAE 249 Psephenus 249 Psephotus 41, 152, 181 Psephurus 70

Pseudacris 246

Pseudagrion 208 Pseudalmenus 252 Pseudamnicola 116, 211 Pseudanodonta 172 Pseudantechinus 3 Pseudanthias 83 Pseudemydura 62 Pseudemys 64, 166 Pseudibis 31, 147 Pseudirion 250 Pseudoatta 101 Pseudobagrus 247 Pseudobarbus 73, 168 Pseudobargus 76 Pseudobias 160 Pseudocalyptomena 45 Pseudocampylaea 190 Pseudocandona 98 pseudocellata, Sacalia 200 PSEUDOCHEIRIDAE 4, 135, 193 Pseudocheirus 4, 193 Pseudochelidon 48 Pseudochirops 4, 5, 135 Pseudochirulus 135, 193 PSEUDOCHROMIDAE 83 Pseudochromis 83 PSEUDOCOCCIDAE 186 Pseudocolopteryx 47 Pseudocopaeodes 252 Pseudocordylus 59, 165 Pseudocossyphus 52, 160 Pseudocotalpa 99 pseudocrinitus, Peromyscus 26 PSEUDOCYCLOPIIDAE 92 Pseudodacnis 55 pseudodolium, Orcula 215 Pseudoglessula 217, 240 Pseudogobiopsis 247 Pseudohydromys 26 pseudoincisus, Glossolepis 204 Pseudois 21, 141, 230 pseudojacosta, Trochoidea 126 pseudomelaneus, Parantica 171 Pseudomoraria 96 Pseudomugil 78, 205, 243 Pseudomyrmex 101 Pseudomys 26, 131, 144, 178 pseudonapaea, Sicista 197 Pseudonestor 56 Pseudoniphargus 90 Pseudonovibos 22 Pseudopalaina 211 pseudopeilegrini, Prognathochromis Pseudophoxinus 73, 168, 203 Pseudophryne 67, 167 Pseudopsectra 254 pseudopulchella, Aprasia 165 Pseudorasbora 246 Pseudorca 242 Pseudoryx 22 Pseudoscaphirhynchus 70 Pseudoscorpion, Empire Cave 89 Pseudoscorpion, Tooth Cave 207 PSEUDOSCORPIONIDA 89, 207 PSEUDOSTIGMATIDAE 108

pseudotrolli, Vitrea 128 pseudozosterops, Randia 160 pseustes, Helenoconcha 189 Psilorhamphus 155 Psilotreta 255 psittacea, Psittirostra 56 psittacea, Treron 39 PSITTACIDAE 39, 151, 180, 242 PSITTACIFORMES 39, 151, 180, 242 Psittacula 41, 152, 181 Psittaculirostris 41 Psitteuteles 41 Psittinus 152 Psittirostra 56 Psittrichas 41 Psophodes 52 pstrossi, Paraphoxinus 202 **PSYCHODIDAE 99** Psychomastatix 108 psychopompus, Scytalopus 46 ptaritepui, Crypturellus 29 Ptchochromoides 86 Pteralopex 9 Pterodroma 30, 179 Pteromys 142, 242 Pteromyscus 142 Pteronotus 11, 137 Pteronura 17 PTEROPODIDAE 8, 136, 177, 193, 241 Pteropus 9, 10, 136, 177, 193, 194, 241 pterotropiana, Spheterista 254 Pteruthius 160 pthonera, Canariella 133 Ptilinopus 39, 151, 180 Ptilocichla 52, 160 PTILONORHYNCHIDAE 58, 132, 164 Ptiloris 164 Ptychalaea 127 Ptychobranchus 112, 172 Ptychocheilus 73 Ptychochromoides 86 Ptychodon 123 Ptychotrema 216 Ptyochromis 86 Puaiohi 51 pubescens, Polylamina 250 pucherani, Campylorhamphus 155 puda, Pudu 20 Pudu, Northern 141 Pudu, Southern 20 Pudu 20, 141 Puertoricomys 178 Puffbird, Sooty-capped 154 Puffinus 30, 146 Puffleg, Black-breasted 43 Puffleg, Black-thighed 153 Puffleg, Colourful 43 Puffleg, Hoary 153 Puffleg, Turquoise-throated 43 Puku 131 pulchella, Neophema 152 pulchellus, Acrolophitus 108 pulchellus, Caprimulgus 198 pulcher, Heliodiaptomus 92 pulcher, Lacconectus 249 pulcherrima, Achatinella 120 pulcherrima, Papustyla 214

Pseudotricula 256

pulcherrima, Petalura 107 pulcherrimus, Psephotus 181 pulchra longicauda, Egernia 234 pulchra nigra, Anniella 246 pulchra, Auriculella 213 pulchra, Cyanolyca 164 pulchra, Macgregoria 58 pulchra, Pteralopex 9 pulchrus, Empicoris 251 puliensis, Sinogastromyzon 75 pulitzeri, Macrosphenus 51 pulla, Microgale 5 pullus, Carunculina 255 pulpa, Mirafra 157 pulsiz, Barbatula 203 pulveratus, Pipistrellus 139 pulverulentus, Pteromyscus 142 Puma, Eastern 224 Puma 224 pumila ssp., Pseudorasbora 246 pumila, Gyrotoma 117 pumila, Parantica 244 pumila, Videna 217 pumilio, Indicator 154 pumilio, Myosciurus 22 pumilio, Rhabdomys 197 pumilus, Pterapus 9 pumilus, Tarsius 194 punae, Deinomimesa 251 punctata, Protemblemaria 87 punctatissima, Knipowitschia 87 punctatus, Falco 34 punctatus, Lacconectus 249 punctatus, Sphenodon 243 punctellum, Mecodema 185 PUNCTIDAE 127, 216 punctipennis, Lacconectus 249 punctiperforata, Mautodontha 189 punctulispira, Boninosuccinea 128 Pungitius 81, 247 Pungu 86 Pungu 86 punicans, Taeromys 145 punicea, Columba 38 punicea, Trochidrobia 173 puntillum, Gibberula 213 Puntius 73, 74, 132, 203, 236 pupa, Palaina 211 pupaeformis, Elimia 117 Pupfish, Amargosa 247 Pupfish, Comanche Springs 79 Pupfish, Conchos 247 Pupfish, Cottonball Marsh 247 Pupfish, Desert 247 Pupfish, Devils Hole 79 Pupfish, Largescale 79 Pupfish, Leon Springs 79 Pupfish, Owens 80 Pupfish, Pecos 79 Pupfish, Salt Creek 247 Pupfish, White Sands 80 pupiformis, Phrantela 116 Pupilla 175, 191, 245 PUPILLIDAE 127, 133, 175, 191, 216, 245 Pupina 212, 256 PUPINIDAE 119, 212, 256 Pupisoma 133

pupoidea, Nanocochlea 116 pupoides, Bythinella 173 Pupaidopsis 216 Pupuharakeke 121 pupukanioe, Achatinella 120 pupula, Graziana 244 pupula, Pupilla 245 purcelli, Metadiaptomus 92 puritana, Cicindela 98 Purpletuft, Buff-throated 46 purpurea, Cochoa 158 purpurea, Gila 72 purpureus, Mastigodiaptomus 92 purpureus, Tropodiaptomus 207 pusilla, Austrochlaritis 173 pusilla, Chaerephan 13 pusilla, Coenocorypha 37 pusilla, Galaxiella 77 pusilla, Micronycteris 11 pusilla, Ochotona 28 pusilla, Palaina 211 pusillior, Hemistoma 116 pusillus, Haeromys 24 pusillus, Loriculus 152 pustulatus, Hydrosaurus 199 puta, Murina 12 putealis, Stygobromus 90 putnamensis, Ochthebius 249 pybasi, Elimia 117 PYCNONOTIDAE 48, 157, 181, 198 Pycnonotus 48, 157, 198 pycnum, Aphaostracon 114 pycrofti, Pterodroma 30 Pyganodon 172 Pygathrix 15 Pygeretmus 143 pygerythrus, Callosciurus 22 pygmaea, Elimia 117 pygmaea, Melanotaenia 168 pygmaea, Pandaka 87 pygmaeus, Cattus 82 pygmaeus, Economidichthys 87 pygmaeus, Hipposideros 136 pygmaeus, Napaeus 244 pygmaeus, Neotragus 141 pygmaeus, Nycticebus 14 pygmaeus, Ponga 16 pygmaeus, Procyon 17 pygmaeus, Somatogyrus 212 pygmeus, Eurynorhynchus 37 pygmeus, Phalacrocorax 147 Pygmy-parrot, Geelvink 152 Pygmy-possum, Long-tailed 220 Pygmy-possum, Mountain 4 Pygmy-tyrant, Fork-tailed 47 Pygmy-tyrant, Rufous-sided 47 Pygmy-tyrant, White-bellied 156 PYGOPODIDAE 60, 165, 234 PYRALIDAE 186, 253 pyramidalis, Reymondia 119 pyramidata, Gyrotoma 118 pyramis, Diplommatina 210 pyramis, Heterapoma 210 pyramus, Poecilmitis 103 Pyreferra 253 Pyrenaeania 174 Pyrenaearia 126, 175

pyrenaica hispanica, Capra 228 pyrenaica ornata, Rupicapra 230 pyrenaica pyrenaica, Capra 228 pyrenaica victoriae, Capra 228 pyrenaica, Belgrandiella 115 pyrenaica, Capra 141 pyrenaica, Rana 201 pyrenaica, Rupicapra 131 pyrenaicus, Galemys 8 pyrenella, Pleurocera 118 Pyrg, Ozark 211 Pyrgina 214 Pyrgulopsis 211, 256 pyriforme, Pleurobema 172 Pyriglena 46 pyroeis hersaleki, Poecilmitis 252 pyrohypogaster, Hypopyrrhus 56 pyronotus, Cambarus 93 pyrrhocephalus, Phaenicophaeus 42 pyrrhocephalus, Yssichromis 86 pyrrhops, Hapalopsittaca 41 pyrrhopterus, Bratogeris 152 Pyrrhula 163 Pyrrhura 41, 152 Python, Indian 165 Python, Western Australian Carpet 234 Python 165 Pyxichromis 86, 185 Pyxis 65 quadragintus, Pardalotus 53 quadrani, Atenia 174 quadrasi, Elasmias 213 quadrasi, Heterapoma 210 quadrasi, Himeroconcha 214 quadrasi, Nesopupa 216 quadrasi, Omphalatropis 210 quadrasi, Succinea 128 Quadrasiella 210 quadratus, Somatogyrus 212 quadricarinatus, Cherax 95 quadricolor, Dicaeum 53 quadricornis, Myoxocephalus 244 quadricornis, Tetracerus 22 quadridens, Pteronotus 137 quadrimaculatus, Gerbillus 24 quadriocellata, Sacalia 64 quadrioculatum, Pseudagrion 208 quadrivittatus australis, Tamias 231 Quadrula 112, 172, 238, 255 quadruncus, Orconectes 94 Quagga 178 quagga, Equus 178 Quail, Himalayan 35 Quail, New Zealand 180 Quail, Ocellated 149 Quail, Snow Mountain 149 Quail-dove, Blue-headed 39 Quail-dove, Bridled 151 Quail-dove, Crested 151 Quail-dove, Grey-headed 151 Quail-dove, Russet-crowned 151 Quail-dove, Veracruz 39 qualtieranus, Iberus 174 quarlesi, Bubalus 20 quathlambae, Pseudobarbus 73 quebecensis, Formicoxenus 100 quebecensis, Myrmica 101

Quechulac, Charal de 78 Quemisia 179 Quenda 219 quenstedti, Bythiospeum 115 quercinus, Eliomys 27 questroana, Amplirhagada 121 Quetzal, Eared 44 Ouetzal, Resplendent 153 quickelbergei, Lepidochrysops 103 Quijarrona, Sardinita 72 quimperiana, Elona 245 Quincuncina 112, 172 quinquestriatus, Callosciurus 22 quintalia, Christianoconcha 127 quintalia, Nancibella 190 Quintalia 190 quinticolor, Capito 44 Quiscalus 163, 182 quitobaquitae, Tryonia 212 Quokka 4 Quoll, Bronze 3 Quoll, Eastern 135 Quoll, New Guinea 3 Ouoll, Northern 135 Quoll, Spotted-tailed 3, 219 Rabbit, Amami 29 Rabbit, Lower Keys Marsh 234 Rabbit, Omiltemi 29 Rabbit, Pygmy 146 Rabbit, Riverine 28 Rabbit, San Jose Brush 146 Rabbit, Sumatran 29 Rabbit, Tres Marias 29 Rabbit, Volcano 29 Rabbitsfoot, Rough 255 rabieri, Picus 45 rabinoi, Liolaemus 60 rabori, Napothera 51 rabori, Nyctimene 9 rabori, Sundasciurus 22 Raccoon, Barbados 178 Raccoon, Cozumel Island 17 Racer, Almeda Striped 246 Racer, Antiguan 61 Racer, Barbados 61 Racer, Black 61 Racer, Leeward Island 61 Racer, Red-bellied 61 Racer, Saint Croix 182 Racer, St Lucia 61 racovitzai conopyge, Monolistra 237 racovitzai, Scardinius 203 Racquet-tail, Blue-crowned 152 Racquet-tail, Blue-headed 41 Racquet-tail, Blue-winged 41 Racquet-tail, Buru 152 Racquet-tail, Green 41 Racquet-tail, Luzon 41 Racquet-tail, Mindanao 41 Racquet-tail, Yellowish-breasted152 radamanthus schreiberi, Euploea 237 raddei, Vipera 243 radiata, Geochelone 65 radiata, Partula 191 radiatus, Anodontoides 172 radiatus, Erythrotriorchis 33 radiceus, Carpococcyx 42

Radiocentrum 126

Radioconus 123 Radiodiscus 123, 214 radiolata, Acanthochelys 165 radiolata, Partula 127 radiolata, Zingis 125 radiolosus, Neomorphus 42 radiosus, Cyprinodon 80 Rafetus 66 rafflesia, Euscheman 252 rafflesii, Megalaima 154 raffrayana, Emballonura 129 rafinesqueana, Lampsilis 111 rafinesquii, Plecotus 13 rahmi, Lophuromys 143 raiatensis, Partula 191 Rail, Auckland Islands 36 Rail, Austral 37 Rail, Bald-faced 36 Rail, Bar-winged 180 Rail, Bogotá 37 Rail, Brown-banded 36 Rail, Chatham Islands 180 Rail, Dieffenbach's 180 Rail, Galápagos 149 Rail, Guam 180 Rail, Inaccessible 36 Rail, Invisible 36 Rail, Junín 36 Rail, Lord Howe 36 Rail, New Caledonian 36 Rail, New Guinea Flightless 198 Rail, Okinawa 36 Rail, Plain-flanked 37 Rail, Red 180 Rail, Rodrigues 180 Rail, Rouget's 150 Rail, Roviana 149 Rail, Sakalava 36 Rail, Snoring 36 Rail, Swinhoe's 36 Rail, Tahiti 180 Rail, Wake Island 180 Rail, Woodford's 36 Rail, Zapata 36 raimondii, Phytotoma 47 Rainbow, Celebes 79 Rainbowfish, Ajamaru Lakes 204 Rainbowfish, Arfak 78 Rainbowfish, Axelrod's 243 Rainbowfish, Bleher's 78 Rainbowfish, Boeseman's 78 Rainbowfish, Bulolo 204 Rainbowfish, Cairns 78 Rainbowfish, Corona 204 Rainbowfish, Dwarf 205 Rainbowfish, Exquisite 204 Rainbowfish, Fly River 205 Rainbowfish, Lake Eacham 78 Rainbowfish, Lake Kurumoi 78 Rainbowfish, Lake Kutubu 78 Rainbowfish, Lake Tebera 205 Rainbowfish, Lake Wanam 78 Rainbowfish, Mayland's 243 Rainbowfish, Misool 243 Rainbowfish, Mountain 205 Rainbowfish, Ogilby's 205 Rainbowfish, Oktedi 78 Rainbowfish, Papuan 243

Rainbowfish, Pima River 205 Rainbowfish, Pygmy 168 Rainbowfish, Ramu 204 Rainbowfish, Red 78 Rainhowfish, Sentani 78 Rainbowfish, Slender 168 Rainbowfish, Spotted 243 Rainbowfish, Strickland 243 Rainbowfish, Tami River 204 Rainbowfish, Van Heurn's 205 Rainbowfish, Waigeo 243 Rainbowfish, Yakati 204 raineyi, Crocidura 7 Rajah, Chestnut 253 raji, Hippocampus 81 RAJIDAE 201 RAJIFORMES 201 rakiurae, Hoplodactylus 165 RALLIDAE 36, 149, 180, 198 Rallina 37, 198 Rallus 37 ramadeva, Lethe 253 Ramiheithrus 255 ramirohitra, Brachyuromys 143 ramonensis, Euchondrus 124 RAMPHASTIDAE 154 ramphastinus, Semnornis 154 Ramphocinclus 49 Ramphodon 43, 153 Ramphotyphlops 62 ramsayi, Aspidites 61 ramsayi, Fluviopupa 173 Ramshorn, Acorn 113 Ramshorn, Magnificent 113 ramuensis, Glossolepis 204 ramulosus, Hippocampus 81 Rana 67, 68, 167, 182, 201, 243 randi, Muscicapa 51 Randia 160 Ranella 173 RANELLIDAE 173 ranfurlyi, Phalacrocorax 31 Ranger, Barber's 252 Rangifer 227 RANIDAE 67, 167, 182, 201, 243 raniformis, Litoria 66 ranjiniae, Rattus 26 Ranodon 68 rapaensis, Canthigaster 88 raphanurus, Rhyncholestes 3 Raphicerus 131 RAPHIDAE 180 Raphiomydas 250 Raphus 180 raptor, Paranyctimene 136 raricosta, Pomatias 244 rarotongensis, Ptilinopus 151 rarum, Aciagrion 208 Rasbora, Vateria Flower 132 Rasbora 74, 132 raspaili, Tacheocampylaea 215 rastellus, Syncomistes 169 Rat, Arizona Cotton 233 Rat, Berkeley Hills Kangaroo 231 Rat, Colorado River Cotton 242 Rat, Dinagat Island Cloud 23 Rat, Earthquake Valley Kangaroo 231

Rat, Fresno Kangaroo 232 Rat, Giant Bushy-tailed Cloud 23 Rat, Giant Kangaroo 23 Rat. Giluwe 144 Rat, Greater Mole 27 Rat, Greater Stick-nest 24 Rat, Gunnison Island Kangaroo 231 Rat, Heath 131 Rat, Hot Springs Cotton 233 Rat, House Rock Valley Kangaroo 232 Rat, Lesser Mole 27 Rat, Luzon Forest 242 Rat, Marsh Rice 233 Rat, Mindoro Climbing 23 Rat, Mt Isarog Striped 23 Rat, Poncelet's Giant 27 Rat, Red Vizcacha 28 Rat, Rock-dwelling 145 Rat, Ryukyu Long-tailed Giant 143 Rat, San Bernardino Kangaroo 231 Rat, San Joaquin Kangaroo 142 Rat, San Quintin Kangaroo 23 Rat, Selinda Veld 242 Rat, Southern Giant Slender-tailed Cloud Rat, Stephens' Kangaroo 131 Rat, Tawitawi Island 26 Rat, Texas Kangaroo 23 Rat, Tipton Kangaroo 232 Rat, Western Small-toothed 24 Rat-kangaroo, Desert 177 rathbunae, Procambarus 95 rathbuni, Typhlomolge 68 Ratsirakia 244 Rattlesnake, Aruba Island 62 Rattlesnake, New Mexican Ridge-nosed rattrayi, Anhydrophryne 167 Rattus 26, 144, 145, 178, 197 Ratufa 22, 245 raveneliana, Alasmidonta 110 ravidus, Turdus 181 raviventris halicoetes, Reithrodontomys raviventris raviventris, Reithrodontomys 233 raviventris, Reithrodontomys 26 ravouxi, Epimyrma 100 ravus, Tomopeas 13 Rayadito, Más Afuera 45 rayi, Moitessieria 173 razae, Alauda 47 reaperi, Farula 255 reburrus, Cambarus 93 recifinus, Platyrrhinus 11 recta, Ligumia 172 recta, Westraltrachia 122 recticulus, Ochthebius 249 rectirostris, Hylocryptus 155 rectirostris, Limnornis 155 rectum, Cristilabrum 122 rectunguis, Centropus 152 recurvatum, Enallagma 106 Recurvebill, Bolivian 45 Recurvebill, Peruvian 155 **RECURVIROSTRIDAE 37** recurvirostris, Avocettula 153 reddelli, Rhamdia 76

reddelli, Stygobromus 90 redfieldi, Partulina 121 Redfin, Berg River 73 Redfin, Burchell's 73 Redfin, Clanwilliam 71 Redfin, Eastern Cape 168 Redfin, Fiery 73 Redfin, Slender 73 Redfin, Smallscale 73 Redfin, Twee River 71 Redfish 82 Redhorse, Bighead 246 Redhorse, Copper 75 Redhorse, Gray 203 Redigobius 169 redimita, Xerarionta 125 Redstart, Ala Shan 160 reducta, Thermomesochra 208 redunca, Redunca 131 Redunca 131, 230 REDUVIIDAE 251 Reed-warbler, Basra 158 Reed-warbler, Nauru 49 Reed-warbler, Nightingale 49 Reed-warbler, Pitcairn 49 Reed-warbler, Streaked 49 Reed-warbler, Tahiti 49 Reedbuck, Bohor 131 Reedbuck, Chanler's Mountain 230 Reedbuck, Mountain 131 Reedbuck, Southern 131 Reedbuck, Southern Mountain 230 Reedbuck, Western Mountain 230 Reedhaunter, Straight-billed 155 reevesii, Syrmaticus 35 reeviana brevicula, Lampsilis 238 reeviana reeviana, Lampsilis 238 refulgens, Quadrula 172 regalis, Heliangelus 43 regalis, Hypseleotris 169 regalis, Pseudanthias 83 regani, Chirostoma 204 regani, Neosalanx 76 regia, Erythrura 57 reginae, Lasius 100 reginicola, Conomyrma 100 regis, Plagiolepis 101 regularis, Ancylus 173 rehbinderi, Strongylognathus 102 rehsei, Acrocephalus 49 reibischi, Bulimulus 126 reichei, Papillogobius 169 reichenowi, Anthreptes 161 reichenowi, Streptopelia 151 reidi, Hippocampus 81 reighardi, Coregonus 77 reimanni, Chelodina 200 reimeri, Procambarus 95 reisalpense, Bythiospeum 115 reiseri, Chirocephalus 91 reiseri, Phyllomyias 156 Reithrodontomys 26, 27, 145, 233, 245 rekohua, Galaxias 76 relevata, Leiostyla 127 relicta, Amaurospiza 162 relicta, Myonycteris 9 relictus, Larus 150

relictus, Platysaurus 165 Relictus 74 religosa, Crocidura 193 remota, Partula 191 remotus, Conocephaloides 109 remseni. Doliornis 46 remyi, Hypnophila 214 remyi, Suncus 8 renauldi, Carpococcyx 152 Renea 113 rennellianus, Zosterops 162 REPTILIA 58, 132, 164, 182, 199, 234, 242, 246 res, Ningbingia 122 reses, Orthalicus 215 resinus, Mandibularca 72 resplendens, Centropyge 84 respublica, Cicinnurus 164 restrictus, Cisticola 198 reticulata, Amastra 189 reticulata, Eos 152 reticulata, Eusthenia 254 reticulata, Insulivitrina 128 reticulata, Meliphaga 162 reticulatus, Coeranoscincus 165 reticulatus, Sanopus 78 retiformis, Bufo 166 retinaculum, Buffetia 125 Retinella 217 Retrecie, Salamis 253 retrocinctum, Dicaeum 53 retrodens, Hoplotilapia 184 RETROPINNIDAE 76, 183 retusa, Obovaria 111 retusus, Chlamyphorus 5 reventazoni, Palaemnema 108 reverberii, Atelognathus 66 revoili, Elephantulus 29 rex, Balaeniceps 147 rex, Clytoceyx 198 rex, Ogasawarana 112 rex, Percina 84 rex, Rhinolophus 11 rex, Tachyoryctes 27 rex, Uromys 27 Reymondia 119 reyniesii, Bythinella 244 reynoldsi, Neoseps 60 reynoldsiana, Spheterista 254 rezvoji, Camptoceras 210 Rhabdomys 197 Rhabdornis, Long-billed 161 Rhabdornis 161 RHABDORNITHIDAE 161 rhabdota, Lyropupa 216 Rhachis 189 Rhadine 248 Rhagada 122 Rhagomys 27 Rhamdia 76 Rhantus 249 Rhantus 98, 185, 249 RHAPHIDOPHORIDAE 108, 254 Rhea, Greater 146 Rhea, Lesser 146 Rhea 146 Rhebok, Grey 131

Rhegmatorhina 155 RHEIDAE 146 RHEIFORMES 146 Rheinardia 35 Rheobatrachus 67 Rheocles 78, 183, 205, 243 rheocola, Litoria 66 Rheodytes 62 Rheomys 145 rheophilus, Taudactylus 67 Rhincodon 201 RHINCODONTIDAE 201 Rhinichthys 74, 183, 246 Rhinoceros, Black 19 Rhinoceros, Great Indian 19, 226 rhinoceros, Haplophthalmus 97 Rhinoceros, Javan 19 Rhinoceros, Northern White 225 Rhinoceros, Sumatran 19 Rhinoceros, White 130 Rhinoceros 19, 225, 226 RHINOCEROTIDAE 19, 130, 225 Rhinoclemmys 64, 166 RHINOCRYPTIDAE 46, 155 Rhinocypha 106 Rhinoderma 201 RHINODERMATIDAE 201 rhinogradoides, Tateomys 27 RHINOLOPHIDAE 10, 129, 136, 194 Rhinolophus 10, 11, 129, 137, 194 Rhinomyias 52, 160 Rhinonicteris 11 Rhinophylla 137 Rhinopithecus 15 Rhinopoma 10 RHINOPOMATIDAE 10 Rhinoptilus 37 Rhipidolestes 107 Rhipidomys 27, 145 Rhipidura 52, 160, 199 rhipidurus, Echimys 197 Rhithrodytes 99 Rhizoplagiodontia 179 Rhizosomichthys 183 Rhodacanthis 181 Rhodacme 113 Rhodeus 236 rhodocephala, Pyrrhura 152 rhodocorytha, Amazona 40 Rhodonessa 32 Rhogeessa 139 rhombifer, Crocodylus 58 rhombosomoides, Cairnsichthys 78 RHOPALIDAE 251 Rhophodon 214 Rhopornis 46 Rhoptromyrmex 101 Rhyacophila 187, 255 RHYACOPHILIDAE 187, 255 Rhyacornis 52 rhynchida, Kenkia 256 RHYNCHOCEPHALIA 58, 243 Rhynchochydorus 90 Rhynchocyon 29, 245 Rhyncholestes 3 Rhynchomeles 193

Rhynchomys 27

RHYNCHOPIDAE 38 Rhynchopsitta 41 Rhyncogonus 248 Rhyncogonus 185 RHYNOCHETIDAE 37 Rhynochetos 37 Rhysoconcha 123 Rhytida 127 RHYTIDIDAE 127, 175, 216 richardsoni liberiensis, Poiana 224 richardsoni, Melanospiza 162 richardsoni, Microhydromys 144 richardsoni, Phrantela 211 richmondi, Sciurus 142 ricketti, Myotis 138 rickseckeri, Hydrochara 249 ricordi, Cyclura 60 ricta, Hemidaina 254 riddellii, Pleurobema 172 ridgwayi, Aegolius 152 ridgwayi, Buteo 33 ridgwayi, Cotinga 46 ridgwayi, Nesotriccus 47 ridgwayi, Thalurania 44 Ridley, Kemp's 63 Ridley, Olive 63 ridleyi, Hipposideros 10 ridleyi, Myotis 138 riedelii, Tanysiptera 154 Riekoperla 109 Riffleshell, Angled 187 Riffleshell, Northern 255 Riffleshell, Tan 255 Riffleshell, Tennessee 187 Riffleshell, Wabash 187 Riflebird, Paradise 164 riggenbachi, Gerbillus 143 rijersmai, Alsophis 61 rileyi cristata, Cyclura 234 rileyi nuchalis, Cyclura 234 rileyi rileyi, Cyclura 234 rileyi, Cyclura 60 rileyi, Poecilmitis 103 Rimator 160 rimiculus ssp., Catostomus 246 rimosus, Lemiox 111 ringens, Diplommatina 210 Ringlet, False 171 Ringlet, False Dewy 253 Ringlet, Gavarnie 253 Ringlet, Larche 253 Ringlet, Ottoman Brassy 253 Ringlet, Raetzer's 171 Ringlet, Sudeten 253 Ringtail, Arfak 193 Ringtail, D'Albertis 4 Ringtail, Lowland 193 Ringtail, Plush-coated 5 Ringtail, Western 4 Ringtail, Weyland 193 rintjanus, Komodomys 24 riochcoensis, Radioconus 123 RIODINIDAE 253 risi sakishimana, Planaeschna 237 risi, Progomphus 107 risora, Alectrurus 47 Rissa 38

rita mattonii, Euphilotes 252 ritsemae, Lacconectus 249 River-martin, White-eyed 48 riversiana, Xantusia 61 rivulatus, Trichomycterus 168 Rivulus 243 Rivulus 205, 243 Roach, Albanian 168 Roach, Black Sea 203 Roach, Danube 203 Roach, Tuna Cave 247 roachi, Myomimus 28 Robberfly, Antioch 250 Robberfly, Hurd's 250 roberti, Alloperla 187 roberti, Chionomys 143 roberti, Conopophaga 155 roberti, Gymnuromys 24 roberti, Nesidiolestes 251 robertsi, Euastacus 96 robertsi, Zenacrhopterus 243 robertsoni, Bellamya 120 Robin, Black-throated Blue 51 Robin, Blue-fronted 158 Robin, Chatham Islands 51 Robin, Grey-headed 159 Robin, Olive-yellow 199 Robin, Rufous-headed 51 Robin, Ryukyu 158 Robin, Snow Mountain 199 Robin, Swynnerton's 52 Robin-chat, White-headed 50 robinsi, Priolepis 169 robinsoni, Coelops 136 robinsoni, Myiophonus 159 Roblinella 174 roborowskii, Carpodacus 199 robusta ssp., Gila 246 robusta, Actinella 174 robusta, Alasmidonta 110 robusta, Dubiraphia 249 robusta, Mystacina 177 robusta, Pantagenia 186 robusta, Partula 191 robusta, Pyrgulopsis 211 robustior, Miniopterus 12 robustus, Eschrichtius 225 robustus isabellinus, Macropus 220 robustus, Chaetodon 84 robustus, Eschrichtius 129 robustus, Eudyptes 29 robustus, Rivulus 205 robustus, Scotophilus 139 robustus, Solegnathus 82 rochussenii, Scolopax 38 Rock-catfish 203 Rock-catfish, Barnard's 76 Rock-catfish, Clanwilliam 76 Rock-rat, Central 27 Rock-skink, Jurien Bay 234 Rock-thrush, Benson's 52 Rock-thrush, Forest 160 Rock-wallaby, Black-footed 220, 241 Rock-wallaby, Brush-tailed 4 Rock-wallaby, Cape York 135 Rock-wallaby, Mountain Claro 135 Rock-wallaby, Prosperine 4

Rock-wallaby, Yellow-footed 135, 220 rockefelleri, Nectarinia 53 Rockfish, Boccacio 82 Rockfowl, Grey-necked 52 Rockfowl, White-necked 51 rockhamptonensis, Sphaerospira 174 Rockjumper, Orange-breasted 158 Rockjumper, Rufous 158 Rocksnail, Agate 118 Rocksnail, Armored 118 Rocksnail, Bigmouth 118 Rocksnail, Helmet 118 Rocksnail, Interrupted 188 Rocksnail, Knobby 118 Rocksnail, Lyrate 118 Rocksnail, Maiden 118 Rocksnail, Muddy 118 Rocksnail, Oblong 118 Rocksnail, Onyx 118 Rocksnail, Ornate 118 Rocksnail, Painted 118 Rocksnail, Plicate 118 Rocksnail, Rotund 118 Rocksnail, Round 117 Rocksnail, Rugose 118 Rocksnail, Smooth 118 Rocksnail, Spotted 118 Rocksnail, Striped 118 Rocksnail, Varicose 118 Rocksnail, Warty 118 Rocky, Eastern Province 88 RODENTIA 22, 131, 142, 178, 197, 230, 242, 245 rodericana, 'Alectroenas' 180 rodericana, Geonemertes 217 rodericanus, 'Necropsittacus' 181 rodericanus, Bebrornis 50 rodericanus, Necrospar 182 rodolphei, Stachyris 52 rodricensis, Pteropus 9 rodriguezensis, Afrogyrus 113 rodriguezensis, Dancea 124 rodriguezensis, Nesopupa 216 rodriguezi, Reithrodontomys 27 rogersi campestris, Procambarus 237 rogersi expletus, Procambarus 237 rogersi ochlocknensis, Procambarus rogersi rogersi, Procambarus 237 rogersi, Atlantisia 36 rogersi, Tomicha 118 Roimontis 214 Roja, Barbo de Cola 71 rolandiana, Moitessieria 244 romanica, Cobitis 203 Romanichthys 84 Romankenkius 192 Romerolagus 29 ronaldi, Beddomeia 115 rondoensis, Galagoides 194 roosevelti, Anolis 59 roquettei, Phylloscartes 47 roraimae, Podoxymys 144 rosacea, Mycteroperca 83 rosae, Amblyopsis 77 rosalia, Leontopithecus 14 Rosalia 98

rosalinda, Gerbillus 242

Rose, Sri Lankan 105 rosea, Partula 127 Rosefinch, Tibetan 199 rosei, Capensibufo 166 rosei, Heleophryne 66 roseicapilla, Ptilinopus 151 roseigaster, Priotelus 153 rosenbergi, Nyctiphrynus 153 rosenbergii, Gymnocrex 36 roseus, Opisthopatus 187 roseveari, Lemniscomys 143 rosewateri, Tridacna 112 rositae, Passerina 162 rosmarus laptevi, Odobenus 224 rosseti, Myotis 138 rossi, Apatalestea 250 rossi, Trigonoscuta 185 rossiana, Paryphanta 216 rossmaessleri, Chilostoma 174 Rossomrymex 101 Rossomyrmex 101 rossouwi, Aloeides 102 rossouwi, Thestor 104 rostrata rostrata, Aprasia 234 rostrata, Helicina 112 rostratum, Trichastoma 160 rostratus, Galaxias 76 rostripes, Diaptomus 207 rostrogaleatus, Engaeus 96 roswellensis, Pyrgulopsis 211 rotanus, Semperdon 214 rotensis, Zosterops 54 rothschildi, Cypseloides 153 rothschildi, Leucopsar 57 rothschildi, Murexia 193 rothschildi, Myospalax 144 rothschildi, Ornithoptera 105 rothschildi, Phalanger 4 rotula, Himeroconcha 214 rotulata, Obavaria 172 rotundata, Bridouxiana 119 ratundata, Parantica 244 rotundatus, Sandracottus 249 rotundicauda, Carcinoscorpius 209 rotundicollis, Dysticheus 248 rouchi, Ceuthonectes 96 rouchi, Spelaeodiaptomus 207 rougetii, Rougetius 150 Rougetius 150 rourei, Nemosia 55 Rousette, Madagascar 10 Rousettus 10, 136 rousseloti, Dendroprionomys 143 rovianae, Gallirallus 149 rowelli bakerensis, Eremarionta 239 rowelli mccoiana, Eremarionta 239 Rowettia 55 rowleyi, Eutrichomyias 50 roxellana, Rhinopithecus 15 roylei, Alticola 143 rozendaali, Murina 138 ruatanica, Dasypracta 28 Ruatara 123 rubecula, Poospiza 55 rubella, Palaina 211 rubellum, Pleurobema 112 rubens, Amastra 121

rubens, Orthetrum 209 ruber, Myotis 12 rubescens, Gallicolumba 39 rubicola, Melomys 25 rubicunda, Bellamya 120 rubicundus, Helicarion 125 rubida, Monodelphis 3 rubida, Rhinoclemmys 64 rubidiceps, Chloephaga 147 rubiginosus, Prionailurus 195 rubra, Foudia 57 rubra, Mycteroperca 206 rubra, Paradisaea 164 rubranura, Felexamia 251 rubricollis, Charadrius 37 rubrifacies, Lybius 154 rubripes, Odontopodisma 108 rubritorques, Anthreptes 53 rubriventer, Eulemur 14 rubriventris, Pseudemys 166 rubrogenys, Ara 40 rubrum, Etheostoma 169 rubrum, Pleurobema 172 ruckii, Cyornis 50 Rudd, Greek 74 ruddi, Heteromirafra 48 rudei, Necydalis 248 rudis, Hetaerina 106 rudis, Jacksonena 173 rudis, Naultinus 243 rudis, Sinployea 190 rudolfi, Ninox 42 rudolphi, Paradisaea 58 rueppelli, Vulpes 195 rueppellii, Nycticeius 139 rufa nigra, Aplodontia 230 rufa phaea, Aplodontia 230 rufa, Formica 170 rufa, Trichocichla 53 rufescens, Atrichornis 47 rufescens, Elisolimax 215 rufescens, Illadopsis 159 rufescens, Rhagomys 27 Ruffe, Balon's 206 Ruffe, Striped 83 ruficapilla, Alcippe 158 ruficauda, Myrmeciza 46 ruficauda, Neochmia 57 ruficaudatus, Lepilemur 241 ruficeps, Eucerceris 251 ruficeps, Luscinia 51 ruficeps, Paradoxornis 160 ruficollaris, Todirhamphus 44 ruficollis, Branta 32 ruficollis, Madanga 53 ruficollis, Sporophila 163 ruficollis, Syndactyla 45 rufifrons tilonura, Gozella 228 rufifrons, Formicarius 45 rufifrons, Garrulax 159 rufifrons, Gazella 21 rufigenis, Atlapetes 162 rufigula, Ficedula 158 rufigularis, Hemitriccus 156 rufigularis, Hyetornis 42 rufilatus, Cephalophus 130 rufina, Gazella 178

rufina, Mazama 141 rufipectus, Arborophila 34 rufipennis, Macropygia 151 rufipennis, Nectarinia 53 rufipes, Phrynops 165 rufiventer, Pteruthius 160 rufiventris, Alsophis 61 rufiventris, Saltator 55 rufocinctus, Kupeornis 159 rufocinerea, Grallaria 46 rufodorsalis, Diplomys 28 rufofilosa, Tanganyicia 119 rufogularis, Alcippe 158 rufogularis, Pachycephala 132 rufolavatus, Tachybaptus 29 rufomarginatus, Euscarthmus 47 rufomerus, Chrysococcyx 198 rufoniger, Spilocuscus 4 rufopectus, Poliocephalus 29 rufosuperciliaris, Hemispingus 162 rufozonata, Pachystyla 190 rufula, Georissa 209 rufum, Rhinoderma 201 rufum, Stenoderma 11 rufus, Canis 16 rufus, Rhinolophus 137 rugensis, Metabolus 51 rugiferus, Bulimulus 126 rugosa, Deinacrida 109 rugosiceps, Oceanides 251 Ruivaco 74 ruki, Rukia 53 Rukia 53, 161 rulieni, Miloderes 248 rumphiana, Quadrula 172 rumpii, Myosorex 7 rumppi, Agabus 248 rupestris, Elephantulus 29 rupicapra asiatica, Rupicapra 230 rupicapra balcanica, Rupicapra 242 rupicapra cartusiana, Rupicapra 230 rupicapra caucasica, Rupicapra 230 rupicapra tatrica, Rupicapra 230 Rupicapra 131, 230, 242 rupicola, Lacerta 165 ruppi, Myomys 25 ruschii, Abrawayaomys 23 ruspolii, Tauraco 42 Russatus 214 rustica, Partula 191 ruthenus, Acipenser 235 ruthenus, Acipenser 70 Rutilus 74, 168, 203 ruwenzorii, Micropotamogale 5 Ruwenzorisorex 7 ruweti, Ploceus 57 ruzskyi, Strongylognathus 102 ryakyuensis amamii, Coeliccia 238 ryakyuensis ryukyuensis, Coeliccia 238 Rynchops 38 Ryssota 215 ryukyuensis asatai, Stylogomphus 238 ryukyuensis watanabei, Stylogomphus sabahensis, Lacconectus 249 sabanicola, Dasypus 193

Sabanjewia 168, 203

Sable, Japanese 224 Sabrefin, Santa Catarina 79 Sabrewing, Long-tailed 153 Sabrewing, Napo 153 Sabrewing, Santa Marta 153 Sabrewing, White-tailed 43 sabrinus californicus, Glaucomys 230 sabrinus coloratus, Glaucomys 230 sabrinus fuscus, Glaucomys 230 sabrinus griseifrons, Glaucomys 230 Sacalia 64, 200 Saccogaster 77 Saccolaimus 10, 136 Saccopteryx 136 sacerdotalis, Crassispira 213 sacerdotum, Monarcha 51 sachalinensis, Microtus 144 sacobianus, Apomys 23 sacramenti, Meriones 25 sacramento, Anthicus 98 Saddleback 132 Sadleriana 116 sadoensis, Euhadra 213 sadonis, Sorex 7 saeronius, Bulimulus 126 Saga 109 SAGDIDAE 216 sagitta, Partula 191 sagittatus, Otus 42 sagittirostris, Viridonia 181 Saguinus 14, 221, 241 Saiga 22 Saiga, Mongolian 230 Saiga, Russian 230 Saiga 22, 230 Sailer, Pale Hockeystick 253 Saimiri 15, 222 saintjohni, Mautodontha 189 sakaramyi, Pachypanchax 79 Saki, Black 222 Saki, Equatorial 241 Saki, Uta Hick's Bearded 222 Saki, White-nosed Bearded 241 Salado, Sardinita de 183 saladonis, Notropis 183 Salamander, Abe's 68 Salamander, Amber-coloured 201 Salamander, Caucasian 167 Salamander, Cheat Mountain 68 Salamander, Chinese Giant 201 Salamander, Desert Slender 68 Salamander, Gold-striped 68 Salamander, Golden 235 Salamander, Green 167 Salamander, Grotto 201 Salamander, Hakuba 68 Salamander, Hokuriku 68 Salamander, Japanese Giant 68 Salamander, Jemez Mountains 68 Salamander, Kern Canyon Slender 68 Salamander, Lake Lerma 68 Salamander, Lake Patzcuaro 246 Salamander, Larch Mountain 201 Salamander, Large Alpine 69 Salamander, Limestone 68 Salamander, Lycian 68 Salamander, Oita 68 Salamander, Oki 68

Salamander, Red Hills 68 Salamander, San Marcos 68 Salamander, Santa Cruz Long-toed 246 Salamander, Sardinian Brook 68 Salamander, Sardinian or Brown Cave Salamander, Semirechensk 68 Salamander, Shasta 68 Salamander, Shenandoah 68 Salamander, Siskiyou Mts 68 Salamander, Tehachapi Slender 68 Salamander, Texas Blind 68 Salamander, Vietnamese 68 Salamandra 69, 235 SALAMANDRIDAE 68, 132, 167, 201, salamandroides, Lepidogalaxias 168 Salamis 253 salamonis, Gallicolumba 39 salamonis, Solomys 27 SALANGIDAE 76 Salanoia 17 salaziensis, Ctenophila 245 salebrosa, Lithasia 118 salebrosus, Solomys 145 salenskii, Soriculus 8 salifana, Partula 191 salimalii, Latidens 9 salinarum, Biomphalaria 173 salinarum, Xolmis 156 salinasensis, Disconaias 110 salinasensis, Lampsilis 255 salinicola, Dolichotis 145 salinus milleri, Cyprinodon 247 salinus salinus, Cyprinodon 247 Salmanderfish 168 Salmo 77, 204 salmoides ssp., Micropterus 247 Salmon, Satsukimasu 77 SALMONIDAE 77, 183, 204, 236, 243, SALMONIFORMES 76, 168, 183, 204, 236, 243, 247 salmonis, Beddomeia 115 salmopunctatus, Anthias 82 Salmothymus 77 Salpingotus 23, 143, 197 Saltator, Masked 163 Saltator, Rufous-bellied 55 Saltator, Thick-billed 163 Saltator 55, 163 Saltillo, Charalito 72 saltuarius, Crypturellus 29 saluposi, Mexilana 97 salvadorii, Psittaculirostris 41 Salvadorina 32 salvanius, Sus 20 Salvelinus 77, 183, 204 Salvethymus 77 salvini, Ochthoeca 156 salvinii, Staurotypus 166 samarensis, Orthotomus 159 samarensis, Penelopides 154 samarensis, Sundasciurus 22 sambavae, Acraea 252 samnitica, Myrmica 101 Samoana 127, 215 samoensis, Gymnomyza 54

samoensis, Pteropus 9 samoensis, Zosterops 54 sampsoni, Dysnomia 187 sampsonii, Epioblasma 111 samurai, Polyergus 101 sanborni, Sciurus 142 sanctacrucis, Nyctimene 177 sanctacrucis, Pteropus 9 sanctaecrucis, Gallicolumba 39 sanctaecrucis, Zosterops 242 sanctaehclenae, Callionymus 87 sanctaehelenae, Charadrius 37 sanctaehelenae, Chromis 86 sanctaehelenae, Stegastes 86 sanctaehelenae, Succinea 175 sancticrucis, Alsophis 182 sanctipaulensis, Akodon 143 sandawanum, Graphium 105 sandbergeri, Bythiospeum 115 Sandelia 88 Sandfish, Clanwilliam 72 Sandia, Perritos de 183 sandiegonensis, Branchinecta 91 Sandpiper, Spoon-billed 37 Sandpiper, Tahitian 180 Sandpiper, Tuamotu 38 Sandpiper-plover, Diademed 150 Sandracottus 249 sandrius, Gomphus 107 Sandshell, Southern 255 sandvicensis, Branta 32 sandwicensis, Eleotris 206 sandwichensis, Porzana 180 sandwichensis, Pterodroma 30 sanfelipensis, Mesocapromys 28 sanfordi, Cyornis 50 sanfordi, Haliaeetus 33 sangirensis, Tarsius 194 sanguicauda, Tominanga 79 sanguinea, Laminella 121 sanguineus, Rhachis 189 sanguinichristi, Pisidium 256 sanitwongsei, Pangasius 203 Sanjika, Dwarf 73 sankara nar, Neptis 253 Sanopus 78 santaanae, Catostomus 75 santamariae, Cyprinella 72 santipaulae, Stegastes 86 santovestris, Aplonis 57 santschii, Monomorium 101 Sanzinia 61 Sapheopipo 45 sapidus, Arvicola 143 sapientis, Solomys 27 Sapphire, White Spotted 103 sarasinorum, Mops 139 sarasinorum, Tamanka 87 sarasinorum, Telmatherina 79 sarasinorum, Xenopoecilus 81 Saratoga, Southern 167 saratogae, Belostoma 250 Sarcogyps 148 SARCOPTERYGII 88 sardus, Prolagus 179 sargenti, Somatogyrus 212 Saroglossa 164

Sarotherodon 86, 236 Sarothrura 37 Sasakia 253 Satan 75 satanas satanas, Chiropotes 222 satanas utahicki, Chiropotes 222 satanas, Allodiaptomus 91 satanas, Colobus 15 saterei, Callithrix 194 satura, Lampsilis 172 SATURNIIDAE 208 satyavati, Lethe 253 satyra, Tragopan 149 SATYRIDAE 171, 253 Satyrodes 253 saudiya, Gazella 178 saulcyi, Hemicycla 125 saundersi, Larus 38 saundersiae, Otomys 144 SAURIA 59, 164, 182, 199, 234, 243, 246 sauvagei, Ptyochromis 86 sauveli, Bos 20 Sauzieri 181 savesi, Aegotheles 43 Sawfin 71 Sawfish, Common 70 Sawfish, Freshwater 69 Sawfish, Largetooth 69 Sawfish, Smalltooth 69 sawtelli, Collocalia 43 Sawwing, Mountain 157 saxatilis, Orconectes 94 Saxicola 52, 160 savi, Zoraena 106 saypani, Zosterops 162 sazimai, Hylodes 67 scabra, Lyropupa 216 Scaevatula 213 scaevola mikawa, Euhadra 239 scalarina, Palaina 211 Scaleshell 172 scalops, Monodelphis 3 Scaly-foot, Brigalow 60 scamandri, Hydrobia 116 scandens, Rhipidomys 27 SCANDENTIA 8 Scaphirhynchus 70 Scarab, Saline Valley Snow-front 250 Scarab, Spotted Warner Valley Dunes 250 SCARABAEIDAE 99, 249 Scardinius 74, 203 SCARIDAE 87 Scartomyzon 203 Scarus 87 Scaturiginichthys 79 Sceloglaux 181 Scelotes 61, 165 Scepomycter 52 schadenbergi, Atrophaneura 105 schadenbergi, Crateromys 23 schaeferi, Pseudois 21 schalleri, Myosorex 7 schaubi, Myotis 194 schauinslandi, Caconemobius 108 schauinslandi, Monachus 17

Schayera 108 scheepmakeri, Goura 39 scherzeri, Euploea 104 Schismatogobius 207 schistacea, Coracina 242 schistacea, Zoothera 161 schistaceus, Hipposideros 136 schistaceus, Mayrornis 159 schisticolor, Myopus 144 Schistura 75 Schizoeaca 155 Schizothorax 74 schlegeli, Philepitta 157 schlegeli, Pseudocheirus 193 schlegelii, Tomistoma 199 schleiermacheri, Polyplectron 35 schmitzi, Rhoptromyrmex 101 schnablii, Amorphochilus 11 schneideri, Bitis 62 schneideri, Pitta 47 schneideri, Teleutomyrmex 102 schneideri, Tiradelphe 105 Schoenicola 160 schoenigi, Parantica 104 schomburgki, Cervus 178 schomburgkii, Micropygia 149 schottlaenderi, Monolistra 97 Schoutedenapus 43 schoutedeni, Schoutedenapus 43 schraetzer, Gymnocephalus 83 schreiberi, Lacerta 165 schreibersi, Miniopterus 138 schrencki, Acipenser 70 schrenki, Perca 206 schulzi, Cinclus 49 schulzi, Dryocopus 154 schulzi, Tonatia 11 schuppi, Ptychodon 123 schweizeri, Macrovipera 62 SCIAENIDAE 84 Scimitar-babbler, Short-tailed51 Scimitar-babbler, Slender-billed 161 SCINCIDAE 60, 165, 182, 200, 234, 243, scindocataracta, Geminoropa 123 sciopteryx, Nesomimesa 251 scipio, Erebia 253 scitula antiochensis, Perdita 251 SCIURIDAE 22, 131, 142, 197, 230, 242, 245 Sciurotamias 22 Sciurus 142, 230, 231 sclateri, Austroglanis 203 sclateri, Barbus 167 sclateri, Cercopithecus 15 sclateri, Chlorotalpa 5 sclateri, Eudyptes 29 sclateri, Lophophorus 35 sclateri, Myosorex 7 sclateri, Sorex 7 sclateri, Spizocorys 157 Sclerodermus 251 Scleronycteris 11 Scleropages 70, 167 scodrensis, Chondrostoma 71 Scolomys 27 SCOLOPACIDAE 37, 150, 180

schaumi shenandoah, Sphaeroderus

248

Scolopax 38, 150 Scolopendra 89 SCOLOPENDRIDAE 89 SCOLOPENDROMORPHA 89 Scomberomorus 88 SCOMBRIDAE 88, 207, 236 Scops-owl, Aniouan 42 Scops-Owl, Flores 245 Scops-owl, Grand Comoro 42 Scops-owl, Javan 42 Scops-owl, Luzon 42 Scops-owl, Mindanao 42 Scops-owl, Mindoro 42 Scops-owl, Palawan 42 Scops-owl, Pemba 153 Scops-owl, São Tomé 153 Scops-owl, Seychelles 42 Scops-owl, Sokoke 42 Scops-Owl, Sumatran 246 Scops-owl, Wallace's 153 Scops-owl, White-fronted 42 SCORPAENIDAE 82 SCORPAENIFORMES 82, 184, 206, 244 Scortum 206, 247 scotica, Loxia 199 Scotoecus 139 Scotomanes 139, 194 Scotopelia 42 Scotophilus 13, 139, 194 Scotorythra 186 scottae, Dendrolagus 4 scotti, Cambarus 93 scotti, Myotis 12 scottodicarloi, Speleophria 97 scratchlevi, Thryssa 202 Screamer, Northern 147 Screech-owl, Colombian 152 Screech-owl, Santa Barbara 152 scripta callirostris, Trachemys 246 scripta, Trachemys 166 scrofa riukiuanus, Sus 226 Scrub-bird, Noisy 47 Scrub-bird, Rufous 47 Scrubfowl, Micronesian 34 Scrubfowl, Moluccan 34 Scrubfowl, Niaufoou 34 Scrubfowl, Nicobar 34 Scrubfowl, Sula 149 Scrubfowl, Tabon 149 Scrubfowl, Vanuatu 34 Scrubwren, Atherton 132 Sculpin, Bear Lake 82 Sculpin, Fourhorn 244 Sculpin, Klamath Lake 206 Sculpin, Pygmy 82 Sculpin, Rough 82 Sculpin, Shoshone 82 Sculpin, Slender 206 Sculpin, Utah Lake 184 Sculpin, Wood River 82 Sculptiferussacia 124 sculpturatus, Bulimulus 126 sculpturatus, Megacolabus 248 scutata, Lissemys 200 scutatus, Augastes 153 scutula, Discus 174 scutulata, Cairina 32 Scytalopus 46

Scythebill, Greater 155 Sea-eagle, Pallas's 33 Sea-eagle, Steller's 33 seabrai, Myotis 12 Seadragon, Leafy 205 Seadragon, Weedy 205 Seahorse, Big-bellied 81 Seahorse, Dwarf 82 Seahorse, Giant 81 Seahorse, Knysna 81 Seahorse, Lined 81 Seahorse, Long-snouted 81 Seahorse, Short-headed 205 Seahorse, Short-snouted 81 Seahorse, Slender 81 Seahorse, Three-spotted 82 Seahorse, White's 82 Seal, Baikal 140 Seal, Baltic 224 Seal, Caspian 17 Seal, Galápagos Fur 17 Seal, Grey 224 Seal, Guadalupe Fur 17 Seal, Hawaiian Monk 17 Seal, Juan Fernandez Fur 17 Seal, Ladoga 224 Seal, Mediterranean Monk 17 Seal, Northern Fur 17 Seal, Saimaa 224 Seal, Ungava 224 Seal, West Indian Monk 178 Seal, Western Pacific Harbor 242 Sealion, Japanese 224 Sebastes 82 secedens, Hyla 201 sechellarum, Copsychus 50 sechellarum, Foudia 57 sechellensis, Bebrornis 50 sechellensis, Sooglossus 68 sechurae, Dusicyon 195 seclusus, Paracymus 249 secundus, Otomops 13 sedula, Prototrachia 122 seeberi, Labeo 72 Seed-finch, Great-billed 162 Seed-finch, Large-billed 162 Seedeater, Black-and-tawny 55 Seedeater, Black-bellied 163 Seedeater, Blackish-blue 162 Seedeater, Buffy-fronted 55 Seedeater, Chestnut 163 Seedeater, Dark-throated 163 Seedeater, Entre Ríos 55 Seedeater, Grey-and-chestnut 163 Seedeater, Hooded 55 Seedeater, Kipengere 163 Seedeater, Marsh 55 Seedeater, Santa Marta 162 Seedeater, Slate-blue 162 Seedeater, Temminck's 55 Seedeater, Tumaco 55 segregata, Muscicapa 199 seimundi, Treron 151 Selasphorus 43 Selevinia 28 selina, Crocidura 7 selium, Nesidiolestes 251 sellare, Etheostoma 184

semicarinata, Partulina 121 semicaudata, Emballonura 10 semicostata, Omphalotropis 210 semilarvata, Eos 152 semilarvatus, Parus 161 semilineata, Tropidophora 188 Semioptera 164 semipalmatus, Eleutherodactylus 201 semipalmatus, Limnodromus 150 semiplumbea, Leucopternis 148 semiplumbeus, Rallus 37 semirubra, Rhipidura 52 Semnopithecus 140 Semnornis 154 semoni, Helicarion 256 semoni, Hipposideros 136 Semotilus 203 Semotrachia 122, 174 semotus, Apodemus 143 semperasper, Notropis 202 Semperdon 214, 245 semperi, Leucopeza 56 semperi, Paludinella 210 senegalensis, Cyclanorbis 166 senegalensis, Trichechus 19 senex, Sturnus 164 senex, Todirostrum 242 senicula, Hypena 186 seniculus amazonica, Alouatta 221 seniculus insulans, Alouatta 221 seniculus juara, Alouatta 221 seniculus puruensis, Alouatta 221 senilis, Gambusia 168 sentaniensis, Chilatherina 78 Sephanoides 43 Seps, Breyer's Long-tailed 59 Seps, Eastwood's Longtailed 182 septendecim, Magicicada 170 septendecula, Magicicada 170 septentrionalis, Lepilemur 14 septentrionalis, Ordtrachia 174 septima, Gomphus 107 sequoicola consors, Helminthoglypta 23**9** seriatus, Psacadonotus 109 Serica 250 sericata, Pronesopupa 216 sericea, Loboparadisea 199 sericeus, Sturnus 164 Sericornis 132 SERICOSTOMATIDAE 255 Sericulus 58 Serin, Ankober 56 Serin, Salvadori's 57 Serin, Yellow-throated 57 Serinus 56, 57, 163 Serow, Chinese 228 Serow, Formosan 21 Serow, Himalayan 228 Serow, Indochinese 228 Serow, Japanese 130 Serow, Mainland 21 Serow, Red 228 Serow, Sumatran 228 serpensinsula, Nactus 59 Serpent-eagle, Andaman 148 Serpent-eagle, Madagascar 33

Serpent-eagle, Mountain 198 shoshone, Pelocoris 251 Serpent-eagle, Nicobar 148 sharpei, Raphicerus 131 Shou 226 SERPENTES 61, 165, 182, 200, 234, 243, sharpei, Terenura 46 Shoulderband, Cape 239 shastae, Hydromantes 68 Shoulderband, Kern 125 serra, Barbus 71 shawmayeri, Hydromys 143 Shoulderband, Merced Canyon 125 serrana, Formicivora 155 Shearwater, Black-vented 30 Shoulderband, Mesa 125 SERRANIDAE 82, 168, 206 Shearwater, Buller's 146 Shoulderband, Morro 125 Serranochromis 132 Shoulderband, Victorville 174 Shearwater, Heinroth's 30 Serrastruma 101 Shearwater, Hutton's 30 shoupi, Orconectes 94 serval constantinus, Leptailurus 223 Shearwater, Newell's 30 showalteri, Lepyrium 116 Serval, North African 223 Shearwater, Pink-footed 30 showalteri, Pleurocera 118 servillei, Onconotus 109 Shearwater, Townsend's 30 showalterii, Leptoxis 118 SESIIDAE 254 Sheep, Barbary 20 Shrew, Andaman 6 Sheep, Bighorn 131 setaria, Leptasthenura 155 Shrew, Azumi 7 Sheep, Blue 141 setaroi, Bradypodion 59 Shrew, Black 8 setchuanus, Eozapus 23 Sheep, Dwarf Blue 21 Shrew, Bornean Smooth-tailed Tree 8 Shrew, Bornean Tree 8 seticostatus, Heterexis 248 Sheep, Egyptian Barbary 245 Sheep, Mexican Bighorn 229 setifrons, Xenornis 46 Shrew, Borneo Water 6 Sheep, Peninsular Bighorn 229 setiliris, Ctenophila 124 Shrew, Dusky 8 Sheep, Putorean Snow 229 Shrew, Egyptian Pygmy 193 Setobaudinia 244 Sheep, Red 245 Shrew, Flores 8 Setobaudinia 174 Sheep, Snow 131 Shrew, Flower's 6 Setomedea 174 Sheep, Weems' Bighorn 229 Shrew, Gabon Dwarf 8 Setonix 4 Shelduck, Crested 32 Shrew, Gansu 7 Setornis 157 Shelduck, Mauritian 179 Shrew, Golden-bellied Tree 8 setosa, Monadenia 121 Shell, Alabama Pearl 110 Shrew, Greater Stripe-backed 7 setosis, Mesacanthotelson 247 shelleyi, Cryptospiza 57 Shrew, Kelaart's Long-clawed 7 setosus, Euastacus 96 shenandoah, Plethodon 68 Shrew, Kozlov's 7 setubalensis, Candidula 126 shepardiana, Elliptio 172 Shrew, Long-tailed Forest 7 setzeri, Myomimus 28 shepherdi, Tasmacetus 197 Shrew, Makwassie Musk 241 sewerzowi, Bonasa 149 Sheppardia 52 Shrew, Malayan Water 6 sexdentata, Helenoconcha 189 sherrini, Nyctophilus 139 Shrew, Nicobar 6 sexlineata, Melanotaenia 205 shieli, Boeckella 91 Shrew, Nicobar Tree 8 sexnotatus, Dryobius 248 Shrew, Orii's 7 shigetai, Japonia 210 sextuberculata, Podocnemis 65 Shrew, Palawan Tree 8 shihi, Eodiaptomus 92 seychellensis, Coleura 10 Shrew, Pale Grey 7 Shijimiaeoides 252 sevchellensis, Pelusios 65 Shrew, Paramushir 7 Shiner, Ameca 183 seychellensis, Tachycnemis 66 Shrew, Pearson's Long-clawed 7 Shiner, Beautiful 71 Seychellibasis 237 Shrew, Philippine Tree 8 Shiner, Blackmouth 73 Shad, Alabama 71 Shrew, Pribilof 7 Shiner, Blue 71 Shad, Allis 202 Shrew, Sado 7 Shiner, Bluehead 202 Shad, Twaite 202 Shrew, Salenski's 8 Shiner, Bluenose 202 shafferyi, Meliobba 173 Shrew, Southern Short-tailed 136 Shiner, Bluestripe 167 Shag, Auckland Islands 31 Shrew, Sri Lankan Long-tailed 6 Shiner, Bluntnose 73 Shag, Bounty Islands 31 Shrew, St Lawrence 7 Shiner, Cahaba 73 Shag, Campbell Island 31 Shrew, Sumatra Water 6 Shiner, Cape Fear 73 Shag, Chatham Islands 31 Shrew-Mole, Chinese 8 Shiner, Colorless 168 Shag, Kenyon's 198 Shrew-mouse, Mt Isarog 23 Shiner, Conchos 71 Shag, New Zealand King 31 Shrew-rat, Mt Isarog 27 Shiner, Cuatro Cienegas 72 Shag, Pitt Island 31 Shrew-tenrec, Dusky 5 Shiner, Durango 183 Shag, Stewart Island 31 Shrew-tenrec, Gracile 5 Shiner, Ouachita Mountain 72 Shama, Black 50 Shrew-tenrec, Greater Long-tailed5 Shiner, Phantom 183 shameli, Rhinolophus 137 Shrew-tenrec, Lesser Long-tailed241 Shiner, Proserpine 71 shantungensis, Crocidura 193 Shrew-tenrec, Pygmy 5 Shiner, Rio Grande 202 Shark, Basking 69 Shrew-tenrec, Short-tailed 241 Shiner, Roughhead 202 Shark, Blacktip 69 Shrew-tenrec, Thomas's 5 Shiner, Sharpnose 202 Shark, Bluntnose Sixgill 69 Shrike, Mountain 157 Shiner, Smalleye 73 Shark, Dusky 69 Shrike, São Tomé Fiscal 48 Shiner, Turquoise 167 Shark, Ganges 69 Shrike-babbler, Black-headed 160 Shining-parrot, Crimson 152 Shark, Great White 69 Shrike-thrush, Bower's 158 Shining-parrot, Masked 152 Shark, Kitefin 69 Shrike-tyrant, White-tailed 47 shitkovi, Pygeretmus 143 Shark, Sand tiger 69 Shrike-vireo, Chestnut-sided 163 Shoebill 147 Shark, Sandbar 69 Shrikebill, Black-throated 158 Short-tail, São Tomé 49 Shark, Silver 71 Shrikebill, Rennell 158 shortridgei, Pseudomys 131 Shark, Whale 201 Shrimp, Alabama Cave 93 shortridgei, Thallomys 145 sharmani, Petrogale 135 Shrimp, Balcones Cave 95 Shortwing, Gould's 158 sharpei, Anthus 157 Shrimp, Brine 91 Shortwing, Rusty-bellied 50 sharpei, Lalage 157 Shrimp, California Freshwater 93 Shortwing, White-bellied 158 sharpei, Pseudocossyphus

Shrimp, Conservancy Fairy 91 Shrimp, Fairy 91 Shrimp, Florida Fairy 91 Shrimp, Giant Fairy 244 Shrimp, Great Lake 90 Shrimp, Kentucky Cave 93 Shrimp, Longhorn Fairy 91 Shrimp, Mona Cave 93 Shrimp, Mono Lake Brine 132 Shrimp, Pasadena Freshwater 185 Shrimp, Peninsula Fairy 91 Shrimp, Riverside Fairy 91 Shrimp, San Diego Fairy 91 Shrimp, Seed 97, 98 Shrimp, Squirrel Chimney Cave 95 Shrimp, Stone Mountain Fairy 91 Shrimp, Syncarid 90 Shrimp, Vernal Pool Fairy 91 Shrimps, Syncarid 247 Siacella 251 siamensis, Crocodylus 58 siamensis, Oreoglanis 76 sibavi. Silhauettea 169 siberiae, Akodon 23 Sibia, Grey 159 sibirica, Phoca 140 sibiricus, Formicaxenus 100 sibiricus, Ranadon 68 Sicalis 163 sicarius, Myotis 12 sichuanensis, Dryomys 27 Sicista 23, 143, 197 sicki, Terenura 46 Sicklebill, Black 58 Sicklebill, Pale-billed 164 Sicydium 169 Sicyopterus 207 Sicyopus 87, 207 sidamoensis, Heteromirafra 48 Sideband, Keeled 121 Sideband, Rocky Coast 239 Sideband, Shasta 215 sidthimunki, Botia 74 sieboldii, Treron 151 siemiradzkii, Carduelis 56 siemsseni, Latoucheornis 162 sierrana, Tetrix 109 Siettitia 185 Sifaka, Diademed 14 Sifaka, Golden-crowned 14 Sifaka, Verreaux's 14 Sigmodon 27, 233, 242 Sigmodantomys 27 signata, Belontia 132 signata, Emydura 243 signatus, Homopus 166 signatus, Leptomys 24 signifer, Stypodon 183 sijuensis, Schistura 75 Sika, Hokkaido 227 Sika, Mantchurian 227 Sika, North China 227 Sika, North Honshu 227 Sika, Rynkyn 227 Sika, Shansi 227 Sika, South China 227 Sika, Taiwan 227 Sika, Tonkin 227

Sika, Tsushima 227 sikkimensis, Rattus 26 sikorae, Rheocles 183 sikatanensis, Clethrionomys 143 silaceus, Celaenomys 143 silenus, Macaca 15 Silhouettea 169 silindensis, Aethomys 242 Silktail 51 sillemi, Leucosticte 199 SILPHIDAE 99 Siltsnail, Crystal 115 Siltsnail, Enterprise 115 Siltsnail, Ichetucknee 115 Siltsnail, Ponderous 115 Siltsnail, Pygmy 115 Siltsnail, Seminole 115 Siltsnail, Wekiwa 115 SILURIDAE 76, 203 SILURIFORMES 75, 168, 183, 203, 243, 247 Siluris 203 Silurus 76, 203 silus, Gambelia 60 silus, Rheobatrachus 67 silvanus, Zosterops 54 silvatica, Geoemyda 64 silvatica, Murina 138 silveri, Glyptorhagada 122 Silverside, Key 168 Silverside, Waccamaw 78 Silverspot 253 Silverspot, Behren's 253 Silverspot, Blue 253 Silverspot, Callippe 253 Silverspot, Great Basin 253 Silverspot, Oregon 253 silvestrii, Strongylognathus 102 silvestris grampia, Felis 223 silvestris, Gallinula 36 silvestris, Rhinolophus 137 silvicola, Otus 153 silvicultor, Cephalophus 141 simatus, Batrachoseps 68 simensis, Canis 16 Simias 15 simile, Lucifuga 77 similis, Engaewa 96 similis, Troglohyphantes 88 simoni, Aneuretus 100 simoniana, Moitessieria 244 simonyi, Gallotia 60 Simoselaps 165 Simoxenops 45, 155 simplex, Betta 88 simplex, Branchinella 91 simplex, Cristilabrum 122 simplex, Lovenula 92 simplex, Pyrgulopsis 211 simplex, Tropodiaptamus 92 Simpsonaias 133 simpsoni, Gaurochromis 85 simpsonianus, Medionidus 111 Simpsoniconcha 255 simrothi, Arion 213 simulator, Leiostyla 127 Simulator 173

simulatus, Habromys 24 simulus, Peromyscus 144 simum cottoni, Ceratotherium 225 simum, Ceratotherium 130 simus, Cyprinodon 80 simus, Hapalemur 14 simus, Kogia 242 simus, Notropis 73 sinaiticus, Paragomphus 107 sinalis, Sorex 8 sinaloae, Progne 198 Sinarapan 132 sinclairi, Carelia 189 sindonis, Hippocampus 81 sinensis, Acipenser 70 sinensis, Alligator 58 sinensis, Hylomys 136 sinensis, Ocadia 166 singularis, Nesopupa 216 singularis, Renea 113 singularis, Xenerpestes 155 sinica. Macaca 140 sinistrum, Beckianum 175 Sinocyclocheilus 74 Sinogastromyzon 75 Sinployea 123, 189, 190, 214 sinuatus, Skistodiaptomus 207 Sinumelon 122 sinuosa, Hirasea 214 sinus, Phocoena 18 sipedon insularum, Nerodia 246 SIPHLONURIDAE 99, 186, 250 Siphonaria 113 SIPHONARIIDAE 113 Siphonorhis 43, 153 sipora, Hylopetes 22 sipora, Iomys 22 siporanus, Leopoldamys 24 Siptornopsis 155 siguijorensis, Ixos 48 Sirang 74 sirang, Puntius 74 SIRENIA 19, 178, 225 sirintarae, Pseudochelidon 48 sirtalis tetrataenia, Thomnophis 246 Siskin, Black-capped 163 Siskin, Cape 163 Siskin, Drakensberg 163 Siskin, Red 56 Siskin, Saffron 56 Siskin, Yellow-faced 56 SISORIDAE 76 sissonii, Thryomanes 158 sisyphodemus, Eleutherodactylus 67 Sitala 215 Sitatunga 141 Sitta 53, 161 **SITTIDAE 53, 161** situla, Elaphe 200 sivalikensis, Burmagomphus 107 sjoestedti, Papilio 171 Skate, Deepsea 201 SKENEIDAE 209 sketi, Alona 90 sketi, Idunella 90 Skiffia 184 Skimmer, Indian 38

Skink, Banded Supple 200 94 Snail, Mexipyrgus de Escobeda 238 Skink, Bermuda Rock 60 sloatianus, Elliptoideus 110 Snail, Mexipyrgus de Lugo 238 Skink, Blue Mountain Water 60 sloatianus, Nephronaias 255 Snail, Mexipyrgus de West El Mojarral Skink, Cape Verde Giant 182 sloggetti, Otomys 144 Skink, Chevron 60 Sloth, Maned 5 Snail, Mexithauma de Cienegas 256 Skink, Dreeite Water 246 slovenica, Belgrandiella 115 Snail, Miller's 115 Skink, Falla's 165 Snail, Morongo Desert 174 slovenica Nitocrella 96 Skink, Grand 60 slovenicus, Proasellus 97 Snail, New Mexico Hotspring 211 Skink, Great Desert 60 Slug, Santa Barbara Shelled 213 Snail, Nicklin's Peninsula 239 Skink, Gronovi's Dwarf Burrowing 165 Snail, Noonday 239 smaragditis, Tinostoma 186 Skink, Günther's Dwarf Burrowing 61 Snail, Nymphophilus de Minckley 256 smargadina, Helicostyla 121 Skink, Gyldenstolpe's Worm 200 Smelt 204 Snail, Painted Snake-coiled Forest214 Skink, Kasner's Dwarf Burrowing 61 Snail, Paludiscala de Oro 116 Smelt, Delta 76 Skink, Kishinoue's Giant 165 Snail, Pilsbry's Narrow-apertured Land Smelt, Pygmy 204 Skink, Korat Supple 200 215 Smerina 253 Skink, Lancelin Island 60 Snail, Plain Cactus 125 Sminthopsis 3, 4, 193, 219 Skink, Legless 200 Snail, Prickly Pear Island 125 smirnovi, Alona 90 Skink, Lomi's Blind Legless 61 Snail, Pupuharakeke or Flax 121 smithi, Euathlus 169 Snail, Rock 174 Skink, Lord Howe Island 61 smithi, Kerivoula 138 Snail, Ross' Land 216 Skink, Macabe Forest 246 smithi, Nemacheilus 74 Skink, MacGregor's 60 Snail, San Clemente Island 215 smithi, Neoplanorbis 113 Skink, Marbled 243 Snail, San Nicolas Island 125 smithi, Siacella 251 Skink, Narrow-bodied 200 Snail, Santa Barbara Island 125 smithi, Thermosphaeroma 97 Snail, Sax Xavier Talus 174 Skink, Otago 61 smithi, Trochidrobia 117 Skink, Pedra Branca 60 Snail, Sculpin 116 smithiana, Bridouxiana 119 Skink, Robust 60 Snail, Snake River Physa 210 smithii, Myospalax 144 Skink, Round Island 60 Snail, Socorro 256 smithii, Geophaps 151 Skink, Sand 60 Snail, Spiny River 118 smithii, Stygobromus 90 Skink, Scree 61 Snail, Stock Island Tree 215 smithii, Terpsiphone 53 Skink, Small-scaled 61 Snail, Strange Many-whorled Land 175 Snail, Anchialine Pool 209 Snail, Thousand Palms Desert 125 Skink, Southern 243 Snail, Anthony's River 188 Snail, Travers' Land 216 Skink, Speckled 165 Snail, Archer's Toothed Land 215 Skink, Striped 61 Snail, Trinity Bristle 121 Snail, Badwater 114 Skink, Three-toed Snake-tooth 165 Snail, Virginia Fringed Mountain 215 Snail, Baker Desert 239 Snail, Western Three-toothed Land215 Skink, Tonga Ground 182 Snail, Bicolor Cactus 125 Snail, White Desrt 125 Skink, Whitaker's 60 Snail, Boulder 118 Snail, Whorled Mountain 126 Skink, Woodbush Legless 60 Snail, Boulder Pile Mountain 126 Snail, Woodformed Land 216 Skipper, Dakota 102 Snail, Carinated Striate Banded Mountain Snail, Wreathed Cactus 125 Skipper, Eight-Spotted 208 Snail-eater, Iwasaki's 200 Skipper, Manfreda Giant 252 Snail, Catalina Mountain 126 Skipper, Pawnee Montane 252 Snake, Amami Takachiho 61 Snail, Cathedral Desert 239 Skipper, Rare 252 Snake, Atlantic Saltmarsh 246 Snail, Chittenango Ovate Amber 217 Snake, Black-striped 165 Skipper, Salt Marsh 252 Snail, Clench's Middle-toothed Land 175 Skipper, Spinose 252 Snake, Broad-headed 62 Snail, Coahuilix de Hubbs 115 Snake, Christmas Island Blind 62 Skipper, Tessellated 252 Snail, Dented Peninsula 239 Snake, Concho Water 246 Skipper, Wandering 170, 252 Snail, Durangonella de Coahuila 116 Snake, Dunmall's 62 Skistodiaptomus 92, 207 Snail, Flat-spired Three-toothed215 Skulpin 77 Snake, Eastern Indigo 246 Snail, Flax 126 Snake, Fiji 62 Skunk, Big Thicket Hog-nosed 224 Snail, Franklin Mountain Talus 174 Snake, Fisk's House 61 sladeniae, Apus 198 Snail, Franklin Mountain Woodland175 Snake, Giant Garter 61 Sleeper, Broadhead 169 Snail, Gillies' Land 216 Snake, Indian Egg-eating 200 Sleeper, Duckbill 169 Snail, Granulated Tasmanian 123 Snake, Kikuzato's Brook 61 Sleeper, Golden 169 Snail, Hochstetter's Land 216 Snake, Krefft's Tiger 234 sleighti, Belocephalus 109 Snail, Idaho Banded Mountain 239 Snake, Lake Cronin 62 slevini, Peromyscus 26 Snail, Indian Yosemite 239 Snake, Lake Erie Water 246 Slider, Big Bend 64 Snail, Iowa Pleistocene 214 Snake, Large-headed Water 61 Slider, Carvalho's 64 Snail, Jackson Lake 256 Snake, Leonard's Pipe 200 Slider, Central Antillean 166 Snail, Jones' Middle-toothed Land215 Snake, Leopard 200 Slider, Colombian 246 Snail, Kanab Amber 128 Snake, Mona Blind 62 Slider, Common 166 Snail, Kauri 175 Snake, Ornamental 62 Slider, Hispaniolan 64 Snail, Lava Rock Mountain 126 Snake, Pfeffer's Reed 200 Slider, Jamaican 64 Snail, Magazine Mountain Middle-toothed Snake, Sakashima Green 165 Slitshell, Excised 117 215 Snake, San Francisco Garter 246 Slitshell, Pagoda 117 Snail, McCoy Desert 239 Snake, Sardinian Grass 234 Slitshell, Pyramid 118 Snail, Mexipyrgus de Churince 238 Snake, Short-nosed 165 Slitshell, Ribbed 117 Snail, Mexipyrgus de Carranza 238 Snake, Striped Harlequin 165 Slitshell, Round 118 Snail, Mexipyrgus de East El Mojarral Snake, Swazi Rock 165 Slitshell, Striate 117 238 Snake, Transvaal Quillsnout 200

sloanii, Orconectes

Snake, Two-striped Garter 200 Snake, Yellow-bellied House 165 Snake-eagle, Southern Banded 148 Snake-lizard, Bronzeback 60 Snapper, Cubera 84 Snapper, Mutton 84 snelli, Thapsia 124 snelsoni, Lythrurus 72 Snipe, Chatham Islands 37 Snipe, Fuegian 150 Snipe, Great 150 Snipe, Imperial 150 Snipe, Latham's 150 Snipe, New Zealand 150 Snipe, Wood 37 snowi, Myrmotherula 46 Snuffbox 255 snyderae, Tilapia 86 snyderi, Catostomus 168 sociabilis, Ctenomys 145 socialis, Pluvianellus 150 societatis, Pipistrellus 194 socotrana, Emberiza 55 socotrensis, Ceratophallus 113 sodalis, Myotis 12 sodyi, Kadarsanomys 143 soemmerringii, Gazello 21 soemmerringii, Syrmaticus 149 Softshell, Burmese Peacock 66 Softshell, Cantor's Giant 66 Softshell, Cuatro Cienegas 65 Softtail, Orinoco 45 Softtail, Russet-mantled 155 Softtail, Striated 45 sokokensis, Anthus 48 sola, Pyrgulopsis 211 solandri, Pterodroma 30 solangiae, Sitta 53 solaris, Dirce 252 Solatopupa 174, 245 solatus, Cercopithecus 15 Solegnathus 82 Solenodon, Cuban 5 Solenodon, Haitian 5 Solenodon 5, 177 SOLENODONTIDAE 5, 177 solenopsidis, Solenopsis 101 Solenopsis 101 solidus, Lanistes 114 Soliperla 254 Solisorex 7 Solitaire, Cuban 159 Solitaire, Réunion 180 Solitaire, Rodrigues 180 Solitaire, Rufous-brown 158 solitaria, Argiocnemis 106 solitaria, Origma 159 solitaria, Pezophaps 180 solitaria, Samoana 127 solitarius, Atelognathus 66 solitarius, Buteo 148 solitarius, Harpyhaliaetus 148 solitarius, Raphus 180 solitarius, Relictus 74 solitarius, Tinamus 146 solitudum, Cristilabrum 122

solomonensis, Nesasio 42

solomonis, Chaerephon 139 Solomys 27, 145 soluta, Wrayanna 210 Somateria 32 Somatochlora 106, 171 Somatogyrus 211, 212 Somersiella 95 somuncurensis, Somuncuria 67 Somuncuria 67 sondaicus annamiticus, Rhinoceros 225 sondaicus sondaicus, Rhinoceros 225 sondaicus, Rhinoceros 19 sonneratii, Gallus 149 Sonorella 174 Sonorense, Charalito 72 sonoriense, Kinosternon 64 SOOGLOSSIDAE 68 Sooglossus 68 Sooty-owl, Lesser 152 sordida, Eumyias 158 sordidus, Rattus 145 sorenseni, Hipposideros 136 sorex, Monodelphis 3 Sorex 7, 8, 136, 193 sorghophilus, Acrocephalus 49 SORICIDAE 6, 136, 193, 241 soricipes, Uropsilus 8 Soriculus 8 soror, Odynerus 251 soror, Pitta 157 sororcula, Penescosta 123 sororcula, Tyto 198 Sosippus 88 Sotalia 196 soulaiana, Ampelita 120 souliei, Actinodura 158 soumagnei, Tyto 42 Sousa 196 Souslik, Spotted 22 sowerbyana, Achatinella 120 sp. 1, Coregonus 247 sp. 1, Elseya 62 sp. 1, Gasterosteus 247 sp. 1, Glossogobius 247 sp. 1, Mogurnda 247 sp. 1, Neosilurus 247 sp. 10, Glossogobius 247 sp. 2, Coregonus 247 sp. 2, Elseya 200 sp. 2, Gasterosteus 247 sp. 2, Glossogobius 247 sp. 2, Mogurnda 247 sp. 2, Neosilurus 247 sp. 3, Elseya 200 sp. 3, Glossogobius 247 sp. 3, Mogurnda 247 sp. 3, Neosilurus 247 sp. 4, Glossogobius 247 sp. 4, Mogurnda 247 sp. 5, Glossogobius 247 sp. 5, Mogurnda 247 sp. 6, Glossogobius 247 sp. 6, Mogurnda 247 sp. 7, Glossagobius 247 sp. 8, Glossogobius 247 sp. 9, Glossogobius 247 sp., Acanthanura 250

sp., Anaspides 247 sp., Antechinus 193 sp., Capromys 178 sp., Catostomus 246 sp., Ciconia 179 sp., Cyprinella 246 sp., Cyprinodon 183 sp., Deinacrida 254 sp., Elassoma 247 sp., Etheostoma 247 sp., Falco 179 sp., Foudia 182 sp., Geocapromys 178 sp., Hemiandrus 254 sp., Hypsipetes 181 sp., Ictalurus 247 sp., Moxostoma 246 sp., Nesophontes 177 sp., Nothobranchius 79 sp., Nycticorax 179 sp., Oeobia 186 sp., Oncorhynchus 247 sp., Pristoceuthophilus 254 sp., Pseudobagrus 247 sp., Pseudogobiopsis 247 sp., Ptchochromoides 86 sp., Pterodroma 179 sp., Pungitius 247 sp., Sauzieri 181 sp., Scortum 247 sp., Styloniscus 247 sp., Tondanus 247 sp., Typhliasina 247 sp., Vireo 56 sp.1, Womersleymeria 250 sp.2, Womersleymeria 250 Spadebill, Russet-winged 47 spadiceus, Dyacopterus 136 spadix, Cephalophus 21 spadix, Dendrolagus 193 spalacinus, Tachyoryctes 145 Spalax 27 spaldingi, Achatinella 188 spaldingi, Lyropupa 216 spaldingi, Ougapia 216 spana, Epargyreus 252 spangleri, Hydroporus 248 Spanglerogyrus 249 Spaniacris 133 SPARIDAE 84, 132 sparna, Lyropupa 216 Sparrow, Cinnamon-tailed 162 Sparrow, Cuban 55 Sparrow, Henslow's 162 Sparrow, Java 57 Sparrow, Oaxaca 162 Sparrow, Sierra Madre 55 Sparrow, Timor 163 Sparrow, Worthen's 55 Sparrowhawk, Imitator 33 Sparrowhawk, Madagascar 148 Sparrowhawk, New Britain 32 Sparrowhawk, Nicobar 147 Sparrowhawk, Slaty-mantled 148 Sparrowhawk, Small 148 sparsa, Quadrula 112 spartacus, Dasyurus 3

spartiaticus, Tropidophoxinellus 203 Spartonoica 155 spathula, Polyodon 70 spatulatus, Clinus 87 spatulatus, Onchotelson 97 Spatuletail, Marvellous 43 spechti, Melomys 25 speciosa bohartorum, Philotiella 252 speciosa, Gambusia 205 speciosa, Geothlypis 56 speciosa, Pila 114 speciosa, Stachyris 52 speciosus, Cambarus 93 speciosus, Pteropus 9 spectabilis, Liomys 142 spectabilis, Reithrodontomys 27 spectaculum, Cristilabrum 173 spectrum, Osmerus 204 spectrum, Tarsius 194 spectrum, Vampyrum 137 specularis, Anas 147 speculigera, Conothraupis 162 Speirops, Fernando Po 53 Speirops, Mount Cameroon 53 Speirops, Príncipe 53 Speirops 53 spekei, Gazella 21 spekeoides, Ploceus 164 Spekia 119 spekii, Harpagochromis 184 spekii, Tragelaphus 141 spelaeo, Amblyopsis 77 spelaea, Cryptazeca 123 Spelaeodiaptomus 207 Spelaeodiscus 128 Spelaeoecia 96 Spelaeomys 178 spelaeonis, Neophaedusa 214 Spelaeornis 52, 160 spelaeotes, Lucifuga 77 spelaeus, Platymantis 67 spelaeus, Speleoperipatus 109 spelaeus, Typhlotriton 201 Spelaseorchestia 90 Speleoithona 92 SPELEOITHONIDAE 92 Speleomantes 68, 167 Speleoperipatus 109 Speleophria 97 speleops, Puntius 74 spelunca, Physella 113 speluncola, Bermudamysis 97 Spelungula 207 spenceri, Bothriembryon 121 spenceri, Litoria 66 spenceri, Opisthotropis 200 Speocirolana 97 Speoplatyrhinus 77 Speothos 16 Spermophilus 22, 142, 197, 231 Speyeria 253 Speyeria 253 SPHAERIDAE 173 Sphaerodactylus 59 Sphaeroderus 248 Sphaerolana 97 SPHAEROMATIDAE 97, 185, 237, 244

Sphaerophysa 75 Sphaerospira 174 sphagnicolus, Niphargus 90 Sphalloplana 256 Spharagemon 108 SPHECIDAE 170, 251 Sphecotheres 199 SPHENISCIDAE 29, 146 SPHENISCIFORMES 29, 146 Spheniscus 29, 146 Sphenocichla 160 Sphenodon 58, 243 SPHENODONTIDAE 58, 243 Spheterista 254 Sphiggurus 28, 178 SPHINGIDAE 105, 186, 208, 254 sphinx, Mandrillus 140 sphyurus, Underwoodisaurus 165 spicatus, Cambarus 93 spicilegus, Mus 144 spiculosa, Ceratella 250 Spider, Dolloff Cave 88 Spider, Glacier Bay Wolf 88 Spider, Great Raft 88 Spider, Kauai Cave Wolf 88 Spider, Key Gnaphosid 207 Spider, Kocevje Subterranean 88 Spider, Lake Placid Funnel Wolf 88 Spider, Nelson Cave 207 Spider, Rosemary Wolf 207 Spider, Tooth Cave 207 Spider, Torreya Trap-door 207 Spiderhunter, Naked-faced 161 Spike, Cape Fear 255 Spike, False 112 Spike, Flat 255 Spike, Waccamaw 255 Spike, Winged 110 Spikedace 72 spilocephalus stresemanni, Otus 246 Spilocuscus 4, 193, 241 spilonotus, Laterallus 149 spiloptera, Porzana 36 spiloptera, Saroglossa 164 spiloptera, Zoothera 161 spilopterus, Centropus 152 Spilornis 148, 198 spilota imbricata, Morelia 234 spilota, Mogurnda 87 spilota, Tasmanoplegas 255 spilotogena, Betta 88 spina, Damochlora 122 spinachoides, Microphis 205 spinalatus, Rousettus 10 spinata, Rhyacophila 255 spinatus, Stygobromus 90 Spindasis 252 Spinedace, Little Colorado 72 Spinedace, Pahranagat 183 Spinedace, Virgin 246 Spinedace, White River 72 Spinetail, Apurímac 45 Spinetail, Blackish-headed 45 Spinetail, Chestnut-throated 155 Spinetail, Coiba 155 Spinetail, Great 155 Spinetail, Hoary-throated 45 Spinetail, Plain 45

Spinetail, Red-shouldered 45 Spinetail, Russet-bellied 45 Spinetail, Rusty-headed 155 spinicaudatus, Engaeus 96 spinifer, Austrosaga 109 spinifera, Acanthinula 217 spinifera, Paralucia 103 spinipennis, Hadramphus 248 spinipes, Troglohyphantes 88 spinipinnis, Phocoena 196 spinosa, Elliptio 110 spinosa, Eoleptestheria 92 spinosa, Heosemys 64 spinosissima, Monolistra 97 spinosissimus, Hippocampus 81 spinosissimus, Solegnathus 82 spinosus, Chalepoxenus 100 spinosus, Pseudocordylus 165 Spinymussel, Altamaha 110 Spinymussel, James River 111 Spinymussel, Tar River 110 spiralis, Pseudonovibos 22 spirizona, Amastra 121 Spirorbula 125, 174 spirulina, Disculella 124 spixii, Acanthochelys 165 spixii, Cyanopsitta 40 Spiza 182 Spizaetus 33, 148 Spizastur 148 Spizella 55 Spizocorys 48, 157 splendens, Ameca 184 splendens, Aphanius 79 splendens, Buprestis 98 splendens, Cynolebias 79 splendens, Macromia 106 splendens, Prosopeia 152 splendens, Suavocallia 119 splendida, Lampsilis 172 splendida, Neophema 41 splendida, Partulina 121 splendidus, Sanopus 78 Splittail, Clear Lake 183 Splittail, Sacramento 73 spodiurus, Oryzomys 197 spodiurus, Pachyramphus 156 spoeckeri, Niphargus 90 Spongillafly, Cooke's 254 Spongillafly, Haleakala 254 Spongillafly, Lobe-wing 254 Spongillafly, Swezey's 254 Spongillafly, Usinger's 254 spongotroktis, Tilapia 86 Spoonbill, Black-faced 31 sporadica, Orangia 123 Sporophila 55, 163 Spratellicypris 74 spratti, Trochoidea 256 Springbok 130 Springfish, Railroad Valley 79 Springfish, White River 79 Springsnail, Alamosa 212 Springsnail, Brown 211 Springsnail, Bruneau Hot 211 Springsnail, Bylas 256 Springsnail, Chupadera 211

Springsnail, Crystal Spring 211 Springsnail, Davis County 211 Springsnail, Diamond Y 212 Springsnail, Distal-gland 211 Springsnail, Elongate-gland211 Springsnail, Fairbanks 211 Springsnail, Fossil 211 Springsnail, Gila 211 Springsnail, Grand Wash 211 Springsnail, Huachuca 211 Springsnail, Idaho 211 Springsnail, Jackson Lake 211 Springsnail, Kingman 211 Springsnail, Median-gland Nevada211 Springsnail, Montezuma Well211 Springsnail, Oasis Valley 211 Springsnail, Pecos 211 Springsnail, Presidio County 211 Springsnail, Roswell 211 Springsnail, San Bernadino 211 Springsnail, Three Forks 211 Springsnail, Verde Rim 211 Sprite, Shoal 113 Springsnail, Page 211 spurca, Pseudocampylaea 190 squalida, Spirorbula 174 SQUALIDAE 69 SQUALIFORMES 69 squamata, Poblana 78 squamatus, Capito 154 squamatus, Mergus 32 squamicaudata, Wyulda 135 squamigenus, Chlamydogobius 87 squamiger, Neomorphus 152 squamigera, Brachypteracias 44 squamosa, Tridacna 133 squamulosa, Baccalena 173 Squawfish, Colorado 73 Squirrel, African Pygmy 22 Squirrel, Big Cypress Fox 230 Squirrel, Big Horn Thirteen-lined Ground Squirrel, Carolina Flying 230 Squirrel, Carruther's Mountain 22 Squirrel, Dangs Giant 245 Squirrel, Delmarva Fox 231 Squirrel, Eastern Fox 231 Squirrel, European 22 Squirrel, Flightless Scaly-tailed 145 Squirrel, Green River Basin Golden-mantled Ground 231 Squirrel, Guerrero Flying 245 Squirrel, Idaho Ground 22 Squirrel, Kodiak Ground 231 Squirrel, Maharashtra Giant 245 Squirrel, Mexican Flying 245 Squirrel, Mohave Ground 22 Squirrel, Mount Graham Red 231 Squirrel, Mountain 142 Squirrel, Nelson's Antelope 22 Squirrel, Nevada Ground 231 Squirrel, Norhern Idaho Ground 231 Squirrel, Oaxaca Flying 245 Squirrel, Palm Springs Round-tailed Ground 231 Squirrel, Persian 142 Squirrel, Prince of Wales Island Flying

Squirrel, Red 142 Squirrel, Russian Flying 142 Squirrel, San Bernardino Flying 230 Squirrel, Sherman's Fox 231 Squirrel, Shumagin Ground 231 Squirrel, Southern Idaho Ground 231 Squirrel, St. Lawrence Island Ground 231 Squirrel, Townsend's Ground 197 Squirrel, Virginia Flying 230 Squirrel, Washington Ground 22 Srilankamys 145 stabilei, Retinella 217 Stachyris 52, 160 stacyi, Zelotypia 252 Stagnicola 113 Stagonopleura 163 stairi, Gallicolumba 151 stalkeri, Myotis 12 Stallingsia 252 stamineus, Awaous 206 stanauli, Noturus 75 Standardwing 164 standingi, Phelsuma 59 Stanleya 119 stannardi, Orconectes 94 stannarius, Aethomys 143 stapes, Quadrula 112 starki, Alabamaubria 249 starki, Taeniopteryx 254 Starling, Abbott's 57 Starling, Bali 57 Starling, Black-winged 164 Starling, Chestnut-cheeked 164 Starling, Kosrae Mountain 182 Starling, Mysterious 182 Starling, Pohnpei Mountain 57 Starling, Rarotonga 57 Starling, Red-billed 164 Starling, Rennell 164 Starling, Réunion 182 Starling, Rodrigues 182 Starling, Rusty-winged 164 Starling, Santo Mountain 57 Starling, Socotra 57 Starling, Spot-winged 164 Starling, Tanimbar 164 Starling, Tasman 182 Starling, White-eyed 57 Starling, White-faced 164 Starling, White-headed 164 Starling, Yellow-eyed 164 starmuehlneri, Afrogyrus 113 Starnoenas 39 starostini, Troglocobitis 203 Staurotypus 166 Steamerduck, Chubut 147 Steatomys 27, 145 stebbinsi, Batrachoseps 68 Steenbras, White 132 steerii, Centropus 42 steerii, Eurylaimus 45 steerii, Pitta 47 steerii, Sundasciurus 142 stegaria, Cyprogenia 110 Stegastes 86 steigmani, Procambarus 95 steinbachi, Asthenes 45 steinbachi, Parides 208

steinbachi, Sarotherodon 86 steindachneri, Barbus 71 steindachneri, Cichlasoma 85 steindachneri, Palea 166 steindachneri, Picumnus 155 steinstansana, Elliptio 110 stejnegeri malonei, Trachemys 246 stejnegeri, Hynobius 201 stejnegeri, Mesoplodon 196 stejnegeri, Trachemys 166 stejnegeri, Viridonia 56 stellata, Brachypteryx 158 stellatus, Acipenser 235 stellatus, Acipenser 70 stelleri, Polysticta 32 stellmacki, Stygobromus 90 Stenasellid, Parzefall's 97 Stenasellid, Wilken's 97 STENASELLIDAE 97 Stenella 129, 196 Stenelmis 99, 249 Steno 196 Stenobothrodes 108 stenocephala, Crocidura 7 Stenocephalemys 145 Stenoderma 11 Stenodus 204, 236 Stenomys 27 STENOPELMATIDAE 108, 133, 209, Stenopelmatus 109, 133 STENOPSYCHIDAE 255 Stenopsychodes 255 stenopus, Niphargus 90 stenotis, Hipposideros 137 Stenotrema 215, 239 Stenotrupis 248 stephani, Heterelmis 249 stephani, Peromyscus 26 stephanidisi, Cobitis 203 stephenensis, Anagotus 248 stepheni, Poecilmitis 103 stepheni, Thestor 104 stepheni, Vini 42 stephensi, Dipodomys 131 stephensi, Hoplodactylus 59 Stereolepis 82 Sterkia 175 Sterlet 70, 235 Sterna 38, 150 sternalis, Engaeus 96 Sternotherus 64 sterreri, Platyops 97 sterreri, Somersiella 95 sterrhapteron, Wetmorethraupis 55 stewardsoni, Dysnomia 187 stewardsonii, Epioblasma 111 stewartii, Achatinella 120 sthenele sthenele, Cercyonis 253 sthennyo, Erebia 253 Stick-insect, Lord Howe Island 187 Stickleback, Unarmored Threespine 247 Stickleback, Enos 247 Stickleback, Giant 247 Stickleback, Santa Ana 247 stictolophus, Lophornis 153 Stictonetta 32

stictoptera, Touit 41 stictothorax, Dysithamnus 155 stierlingi, Dendropicos 154 stilbocarpae, Hadramphus 248 Stilt, Black 37 stimpsoni, Sicydium 169 Stingray, Giant Freshwater 70 Stiobia 116 stiparum, Helicella 126 Stiphodon 87 Stipiturus 132 Stirrupshell 112 Stitchbird 54 stiversiana miwoka, Helminthoglypia stiversiana williamsi, Helminthoglypta 239 stizodon, Sorex 8 Stizostedion 206 stochi, Nitocrella 96 stocki, Argonemertes 217 stoddartii, Quintalia 190 stokesii aethiops, Egernia 234 stokesii badia, Egernia 234 stokoei, Colophon 99 stolli, Adelopoma 114 Stomatepia 86 Stonefly, Cheaha 254 Stonefly, Fender's 254 Stonefly, Georgia 254 Stonefly, Hanson's Appalachian 254 Stonefly, Lake Tahoe Benthic 254 Stonefly, Leon River 254 Stonefly, Meltwater 254 Stonefly, Mount Donna Buang Wingless Stonefly, Mount Kosciusko Wingless 109 Stonefly, Otway 209 Stonefly, Robert's 187 Stonefly, Schoolhouse Springs 254 Stonefly, Wahkeena Falls Flightless 254 Stonemyia 185 storeri, Cypseloides 198 Stork, Milky 31 Stork, Oriental 31 Stork, Painted 147 Stork, Storm's 31 Storm-petrel, Ashy 146 Storm-petrel, Guadalupe 30 Storm-petrel, Markham's 198 Storm-petrel, Matsudaira's 198 Sturm-petrel, Ringed 197 Storm-petrel, Swinhoe's 146 Storm-petrel, Tristram's 146 Storm-petrel, Wedge-rumped 146 Storm-petrel, White-vented 197 stormi, Ciconia 31 stormi, Plethodon 68 Stormsia 119 straeleni, Bathanalia 119 straminea claibornensis, Lampsilis 238 straminea straminea, Lampsilis 238 straminea, Palaua 215 strauchi, Neurergus 201 strawni, Fallicambarus 94 strebeliana, Leptinaria 175 Streber 84 streber, Zingel 84

streckeri illinoensis, Pseudacris 246 streckeri, Lampsilis 111 streeti, Talpa 8 strengi, Somatogyrus 212 strenua, Ninox 42 strenuus, Zosterops 181 strepsiceros, Tragelaphus 131 STREPTAXIDAE 128, 175, 191, 216, 239, 245 STREPTOCEPHALIDAE 91, 207 Streptocephalus 91, 207 Streptocitta 164 Streptopelia 151 Streptostyla 215 stresemanni, Graphium 105 stresemanni, Merulaxis 46 stresemanni, Zaratornis 47 stresemanni, Zavattariornis 58 striata, Coxiella 256 striata, Paratherina 78 striata, Stachyris 52 striata, Vitrea 217 striatapila, Omphalotropis 210 striaticostus, Gonospira 128 striatitala, Helicella 174 striatula, Japonia 210 striatula, Lyropupa 216 striatulum, Etheostoma 83 striatum, Oligosoma 61 striatus fosteri, Epicrates 246 striatus, Chaetornis 50 striatus, Epinephelus 83 striatus, Simoxenops 45 stricklandii, Gallinago 150 strigata kororensis, Palaina 256 strigata, Palaina 211 STRIGIDAE 42, 152, 181, 198, 245 strigidorsa, Mustela 17 STRIGIFORMES 42, 152, 181, 198, 245 strigirostris, Didunculus 38 Strigocuscus 193 Strigops 181 strigosa goniogyra, Oreohelix 239 strigosa, Elimia 117 strigosus, Cambarus 93 striolata, Palaina 211 Striped-babbler, Luzon 52 Striped-babbler, Negros 52 Striped-babbler, Palawan 52 Striped-babbler, Panay 52 Strix 42, 153 strobila, Pachysaga 109 strodeanum, Pleurobema 112 stromatolicola, Leptocaris 96 STROMBIDAE 212 Strongylognathus 102 Strophitus 172 strophium, Odontophorus 35 STROPHOCHEILIDAE 128 strumicae, Cobitis 203 Strumigenys 102 STRUTHIONIFORMES 179 strutti, Thestor 104 Strymon 252 Strymon 103 Stubtail, Timor 161 stuhlmanni, Lanistes 114

stuhlmanni, Tropodiaptomus 92 stumperi, Epimyrma 100 Stupidogobius 87 Sturanyella 209 sturdeei, Pipistrellus 13 Sturgeon, Adriatic 70 Sturgeon, Alabama 70 Sturgeon, Amur 70 Sturgeon, Atlantic 167, 235 Sturgeon, Baikal 235 Sturgeon, Chinese 70 Sturgeon, Common 70 Sturgeon, Green 70 Sturgeon, Gulf 235 Sturgeon, Lake 70 Sturgeon, Large Amu-Dar Shovelnose 70 Sturgeon, Lena River 235 Sturgeon, Pallid 70 Sturgeon, Persian 70, 235 Sturgeon, Russian 70, 235 Sturgeon, Sakhalin 70 Sturgeon, Ship 70, 235 Sturgeon, Shortnose 70 Sturgeon, Shovelnose 70 Sturgeon, Siberian 70, 235 Sturgeon, Small Amu-Dar Shovelnose70 Sturgeon, Stellate 70, 235 Sturgeon, Syr-Dar Shovelnose 70 Sturgeon, White 167, 236 Sturgeon, Yangtze 70 sturio, Acipenser 70 Sturnella 56 STURNIDAE 57, 164, 182 Sturnira 11, 137 Sturnus 164 stygia, Lonchura 163 Stygichthys 203 Stygicola 77 Stygionympha 253 stygius dentatus, Androniscus 237 stygius stygius, Niphargus 237 Stygobromus 89, 90, 185 Stygodiaptomus 92 Styloctenium 136 stylodon, Erepta 125 Stylogomphus 238 STYLOMMATOPHORA 120, 133, 173, 188, 213, 238, 244, 256 STYLONISCIDAE 247 Styloniscus 247 Stylurus 107 stymphalicus, Pseudophoxinus 168 Stypodon 183 styriaca, Belgrandiella 115 Styx 252 Suavocallia 119 subalaris, Macroagelaius 163 subangulata, Lampsilis 255 subarcuata, Bofilliella 123 subaspera, Rana 68 subbadius, Rhinolophus 194 subcalliferus, Caseolus 124 subcavernula, Libera 189 subcentralis, Nesopupa 216 subcristatus, Conolophus 59 subcylindrica, Cryptazeca 123 subcylindrica, Lamellidea 213

subdetecta, Harmogenanina 190 subequalum, Thermosphaeroma 244 subflavus, Epicrates 61 subgutturosa marica, Gazella 228 subgutturosa, Gazella 141 subhyalina addita, Gulella 240 sublaevis, Canthocamptus 96 sublaevis, Harpagoxenus 100 sublevata, Semotrachia 174 sublineata, Notopala 120 submaritima, Omphalotropis 210 submissus, Helicarion 256 subnecata, Draparnaudia 124 subniger, Pteropus 177 Suboestophara 126, 175 subpersonatus, Ploceus 57 subplana, Lexingtonia 111 subplicata, Idiomela 125 subplicatus, Chilonopsis 192 subrostrata, Amastra 189 subrotunda, Fusconaia 172 subrotunda, Obovaria 172 subrubra, Ficedula 50 subruficollis, Aceros 44 subrufus, Rhinolophus 11 subsimilis, Epigomphus 107 subsoror, Amastra 189 subspinosus, Chaetomys 28 subtecta, Petasina 215 subtentum, Ptychobranchus 172 subterranea, Lucifuga 77 subterraneus, Cambarus 93 subterraneus, Typhlichthys 77 subtila, Westraltrachia 122 subtilis, Mautodontha 189 subtilis, Picumnus 155 subtilis, Sicista 143 subtilis, Sphalloplana 256 subtilis, Stygobromus 90 subtruncatus, Chilonopsis 192 subulata, Urosphena 161 Subulina 217 SUBULINIDAE 128, 175, 191, 217, 240 Subuliniscus 128 subvexus, Strophitus 172 subviridis, Lasmigona 172 Succinea 128, 175, 217 SUCCINEIDAE 128, 175, 217 succinoides, Bulinus 113 succissa, Fusconaia 172 Sucker, Blackfin 243 Sucker, Blue 168 Sucker, Goose Lake 246 Sucker, Harelip 183 Sucker, Jasper Longnose 246 Sucker, Jenny Creek 246 Sucker, June 246 Sucker, Klamath largescale 168 Sucker, Lost River 75 Sucker, Modoc 75 Sucker, Razorback 75 Sucker, Rustyside 168 Sucker, Salish 246 Sucker, Santa Ana 75 Sucker, Shortnose 75 Sucker, Snake River 183 Sucker, Warner 75

Sucker, White River 246 Sucker, Yaqui 75 Sucker, Zuni Bluehead 246 Suckermouth, Incomati 76 Suckermouth, Lowveld 243 sudetica, Erebia 253 Sudisorex 8 suenoae, Mandarina 214 suevica, Vallonia 217 Sugarspoon 187 SUIDAE 20, 141, 178, 226 sukatschewi, Garrulax 50 sula, Coracina 242 sulcata, Geochelone 65 sulcata, Nesosydne 251 sulcata, Newcombia 121 sulcatus, Gonidomus 128 sulcidens, Carterodon 145 sulewattan, Parantica 104 sulfusus, Nysius 251 **SULIDAE 30, 146** sulphuraria, Poecilia 80 sulphurata, Emberiza 55 sulphurea, Cacatua 40 sulphurius, Hydroporus 248 sumatraensis maritimus, Capricornis 228 sumatraensis milneedwardsii, Capricornis 228 sumatraensis rubidus, Capricornis 228 sumatraensis sumatraensis, Capricornis 228 sumatraensis thar, Capricornis 228 sumatraensis, Capricornis 21 sumatrana, Ardea 147 sumatrana, Chimarrogale 6 sumatrana, Lutra 17 sumatranus, Dicrurus 164 sumatrensis harrissoni, Dicerorhinus sumatrensis lasiotis, Dicerorhinus 225 sumatrensis sumatrensis, Dicerorhinus 225 sumatrensis, Dicerorhinus 19 sumbae, Hipposideros 137 sumichrasti, Aimophila 162 sumichrasti, Bassariscus 140 sumichrasti, Hylorchilus 49 sumnerensis, Cygnus 179 Sunangel, Bogotá 43 Sunangel, Royal 43 Sunbeam, Purple-backed 43 Sunbird, Amani 53 Sunbird, Apo 161 Sunbird, Apricot-breasted 242 Sunbird, Banded 53 Sunbird, Elegant 53 Sunbird, Giant 53 Sunbird, Loveridge's 161 Sunbird, Moreau's 161 Sunbird, Neergaard's 161 Sunbird, Pemba 161 Sunbird, Plain-backed 161 Sunbird, Prigogine's Double-collared242 Sunbird, Rockefeller's 53 Sunbird, Rufous-winged 53 Sunbird, Ursula's 161 suncoides, Ruwenzorisorex 7

Suncus 8, 193 Sundamys 27 Sundasciurus 22, 142 Sundoreonectes 75 Sunfish, Bluebarred Pygmy 83 Sunfish, Carolina Pygmy 169 Sunfish, Spring Pygmy 247 Suni 131 superba, Pitta 47 superbum, Spharagemon 108 superbus, Chalinolobus 12 superciliaris, Polystictus 156 superciliaris, Xiphirhynchus 161 superciliosa, Ophrysia 35 superficialis, Ataenius 250 superflua, Rhipidura 160 supramontes, Speleomantes 167 surda, Touit 41 sureyanus, Aphanius 79 Surprise, Schneider's 105 surrrufus, Stiphodon 87 Sus 20, 141, 178, 226 susiana, Crocidura 7 suslicus, Spermophilus 22 suspectum, Heloderma 59 suteri, Omphalotropis 210 suteri, Peripatoides 109 sutilosa, Cupedora 173 suttkusi, Scaphirhynchus 70 suturalis strigosa, Partula 239 suturalis vexillum, Partula 239 suturalis, Omphalotropis 210 suturalis, Partula 239 svallize, Leuciscus 72 svetovidovi, Salvethymus 77 swainson, Euploea 171 swainsoni, Onychorhynchus 47 swainsonii insulanus, Antechinus 219 swainsonii, Polytelis 41 swalesi, Turdus 53 Swallow, Bahama 157 Swallow, Blue 48 Swallow, Golden 157 Swallow, Red Sea 48 Swallow, White-tailed 48 Swallowtail, African Giant 208 Swallowtail, Chinese Three-tailed 244 Swallowtail, Corsican 105 Swallowtail, Cream-banded 105 Swallowtail, Fluminense 105 Swallowtail, Hahnel's Amazonian 208 Swallowtail, Harris' Mimic 253 Swallowtail, Homerus 105 Swallowtail, Jordan's 105 Swallowtail, Kilimanjaro 171 Swallowtail, Ludlow's Bhutan 105 Swallowtail, Madagascan Emperor 208 Swallowtail, Mansfield's Three-tailed208 Swallowtail, Poey's Black 208 Swallowtail, Scarce Haitian 208 Swallowtail, Schaus' 253 Swallowtail, Yellow Kite 105 Swallowtail, Zetides 105 Swamp-warbler, Grauer's 50 Swamphen, Lord Howe 180 Swan, Chatham Island 179 Swan, Trumpeter 147 swanepoeli, Lepidochrysops 103

swanepoeli, Poecilmitis 103 syriaca, Calopteryx 106 Takifugu 207 swanepoeli, Thestor 104 syrichta, Tarsius 129 Takin 21 swarthi, Nesoryzomys 178 Syrichtus 252 Takin, Bhutan 227 swazicus, Lamprophis 165 syrinx, Metisella 252 Takin, Golden 227 swezeyi, Aeschrithmysus 248 syrman, Neogobius 206 Takin, Mishmi 227 swezeyi, Nesithmysus 248 Syrmaticus 35, 149 Takin, Sichuan 227 talaseae, Zoothera 161 swezeyi, Pseudopsectra 254 Syrnolopsis 119 swezeyi, Zorotypus 255 SYRPHIDAE 250 talbotae, Formica 100 swierstrai, Chiloglanis 243 syrticus, Gerbillus 24 talbotae, Monomorium 101 swierstrai, Francolinus 35 szczytkoi, Leuctra 254 Talpa 8 Swift, Dark-rumped 43 TALPIDAE 8 szechenyii, Tetraophasis 149 Swift, Fernando Po 198 TABANIDAE 99, 185, 250 talpina, Partulina 213 Swift, Rothschild's 153 tabellata, Discula 124 talpoides douglasi, Thomomys 231 Tamanka 87 Swift, Schouteden's 43 Tacheocampylaea 215 Swift, Waterfall 153 tacheoides, Tacheocampylaea 215 tomarae, Epimyrma 100 Swift, White-chested 43 tamarani, Canariomys 178 Tachuri, Bearded 156 Swift, White-fronted 198 Tachuri, Grey-backed 156 Tamaraw 20 swiftii, Achatinella 120 Tachybaptus 29 Tamarin, Andean Saddle-back 241 Swiftlet, Atiu 43 Tamarin, Black-chinned Emperor 221 Tachycineta 157 Swiftlet, Mascarene 153 Tamarin, Black-faced Lion 14 Tachycnemis 66 Swiftlet, Mayr's 198 Tamarin, Cotton-top 14 Tachyeres 147 Swiftlet, Seychelles 43 Tamarin, Golden Lion 14 Tachygia 182 Swiftlet, Tahiti 43 Tamarin, Golden-headed Lion 14 TACHYGLOSSIDAE 3, 219 Swiftlet, Volcano 43 Tamarin, Golden-mantled Saddle-back Tachyglossus 219 Swiftlet, Whitehead's 43 241 Tachyoryctes 27, 145 swinhoei, Capricornis 21 Tamarin, Golden-rumped Lion 14 Tachypleus 209 swinhoii, Lophura 149 Tamarin, Pied 221 Tachysphex 170 Swordfish 207, 236 Tamarin, White-footed 14 taczanowskii, Agouti 145 Swordtail, Andamans 105 tamarugense, Conirostrum 55 taczanowskii, Nothaprocta 29 Swordtail, Sri Lankan Five-bar 253 tambusisiana, Idea 104 taczanowskii, Podiceps 29 swynnertoni, Swynnertonia 52 Tamesi, Molly del 80 Tadarida 13, 139 Swynnertonia 52 Tamias 22, 231 Tadorna 32 Syconycteris 10 Tamiasciurus 231 taeniabronchum, Bradypodion 59 Sygnathoides 205 Tanager, Azure-rumped 55 taeniata elongata, Partula 239 Tanager, Azure-shouldered 163 sylhetensis, Kachuga 200 toeniata nucleola, Partula 239 Tanager, Black-and-gold 54 Sylph, Bamboo 252 taeniata simulans, Partula 239 Tanager, Black-and-white 162 Sylph, Dickson's 252 taeniata, Leptoxis 118 Tanager, Black-backed 55 sylvanus, Hygrotus 248 taeniata, Partula 239 Tanager, Blue-and-gold 162 sylvanus, Macaca 15 taeniatus, Ophidiocephalus 60 Tanager, Blue-whiskered 163 sylvestris, Gallirallus 36 Taenioides 169 Tanager, Brown 162 sylvestris, Micronycteris 137 taeniolata, Achatinella 120 Tanager, Cherry-throated 55 Sylvia 52 taeniolata, Palaina 211 Tanager, Cone-billed 54 Sylvietta 160 taeniolatus, Phyllopteryx 205 Tanager, Dotted 163 Sylvilagus 29, 146, 234 taeniops, Hippocampus 81 Tanager, Gold-ringed 54 sylviolus, Phylloscartes 156 TAENIOPTERYGIDAE 254 Tanager, Green-capped 55 Sylvisorex 8, 241 Taeniopteryx 254 Tanager, Green-naped 163 symbiotica, Myrmica 101 Taeromys 27, 145 Tanager, Multicoloured 54 symbiotica, Pheidole 101 Taheitia 212 Tanager, Orange-throated 55 symmetochus, Megalomyrmex 100 tahitiensis, Numenius 37 Tanager, Purplish-mantled 162 symonsi, Serinus 163 Tahr. Arabian 21 Tanager, Seven-coloured 55 Sympetrum 187 Tahr, Himalayan 21 Tanager, Sira 163 Synallaxis 45, 155 Tahr, Nilgiri 21 Tanager, White-banded 162 Synanthedon 254 Tailorbird, Black-headed 159 Tanager, White-rumped 162 Synaptomys 233 Tailorbird, Long-billed 51 Tanager-finch 55 SYNBRANCHIDAE 82, 205 Tailorbird, Yellow-breasted 159 tanago, Tanakia 74 SYNBRANCHIFORMES 82, 205 taintori, Xenodiscula 216 Tanakia 74 Syncaris 93, 185 Taipidon 190 tanasi, Percina 84 Syncerus 131 taitensis, Gulella 128 Tandan, Belinger River 247 Syncomistes 169 taitianum, Pleurobema 112 Tandan, Cooper Creek 247 Syndactyla 45 taitungensis, Hemimyzon 74 Tandan, Kutubu 76 syndactylus, Hylobates 140 taivanus, Plecotus 13 Tandanus 247 SYNGNATHIDAE 81, 205 Tandonia 215 taivanus, Pycnonotus 157 SYNGNATHIFORMES 81, 205 tanganjicae, Zoothera 161 takahashii, Chamalychaeus 213 Syngnathus 82, 205 Takahe 36 tanganyicense, Neothauma 120 SYNLESTIDAE 108, 171 takakurae, Hippocampus 81 tanganyicensis, Martelia 119 Syntheosciurus 142 takatsukasae, Monarcha 51 tanganyicensis, Reymondia 119 Synthliboramphus 38, 150 Tanganyicia 119 takedai, Hynobius 68

Tangara 55, 163 tanmurrana, Turgenitubulus 122 tannensis, Ptilinopus 151 tanneri, Bulimulus 126 tanneri, Troglodytes 49 tanneri, Utabaenetes 108 tansaniana, Crocidura 7 tantillus, Neoplanorbis 113 tantula, Serica 250 tanycephalus, Galaxias 77 Tanygnathus 41 Tanysiptera 154, 198 Taoniscus 29 Tapaculo, Bahia 46 Tapaculo, Brasília 46 tapeinopterus, Encheloclarias 76 Taphozous 10, 136 Taphrolesbia 44 Tapir, Central American 19 Tapir, Malayan 19 Tapir, Mountain 19 TAPIRIDAE 19, 141 Tapirus 19, 141 tapoatafa pirata, Phascogale 219 tapoatafa tapoatafa, Phascogale 219 tapoatafa, Phascogale 135 tappaniana, Partulina 121 taprobana, Parantica 171 tarabinii, Pardiglanis 203 tarandus pearyi, Rangifer 227 Tarantula, Red-kneed 169 tarapacensis, Tropidurus 199 tarbinskii, Chalepoxenus 100 tarda, Otis 37 tardigradus, Loris 14 tarichi, Chalcalburnus 202 tarraceuse, Deroceras 121 tarravillensis, Allocharopa 174 Tarsier, Lesser Spectral 194 Tarsier, Philippine 129 Tarsier, Spectral 194 Tarsiger 160 TARSIIDAE 129, 194 Tarsius 129, 194 Tarsomys 27 Tartarocreagris 207 tartarus, Cambarus 93 tasanae, Rana 201 Taskiria 254 Taskrapsyche 254 Tasmacetus 197 tasmaniae, Canthocamptus 96 tasmaniae, Megalanura 250 tasmanica, Apteropanorpa 254 tasmanica, Beddomeia 115 tasmanicus, Bothriembryon 256 tasmaniensis, Arachnocampa 250 tasmaniensis, Edwardsina 99 Tasmanipatus 109, 255 Tasmanophlebia 99 Tasmanoplectron 108 Tasmanoplegas 255 Tasmaphena 127 tatarica mangolica, Saiga 230 tatarica tatarica, Saiga 230 tatarica, Saiga 22 tatei, Dactylopsila 5

tatei, Eptesicus 194 tatei, Premnoplex 45 Tateomys 27 tatouay, Cabassous 136 tatricus, Microtus 144 tatricus, Spelaeodiscus 128 tattawuppana, Glyptorhagada 122 tattersalli, Propithecus 14 Taudactylus 67 Tauraco 42, 152 tauricus, Chalepoxenus 100 taurinus albojubatus, Connochaetes taurinus cooksoni, Connochaetes 228 taurinus johnstoni, Connochaetes 228 taurinus mearnsi, Connochaetes 228 taurinus taurinus, Connochaetes 228 taurinus, Connochaetes 130 Taurotragus 141 taurus, Carcharias 69 tavala, Apatania 255 tawarensis, Poropuntius 73 tawarensis, Rasbora 74 tawitawiensis, Rattus 26 taxicolor bedfordi, Budarcas 227 taxicolor taxicolor, Budorcas 227 taxicolor tibetana, Budorcas 227 taxicalar whitei, Budorcas 227 taxicolor, Budorcas 21 TAYASSUIDAE 20 taylari, Arius 204 taylori, Noturus 75 Tayloria 217, 240 Tayra, Greyheaded 224 tavrona, Caralliozetus 87 tchadiensis, Biomphalaria 113 Teal, Baikal 32 Teal, Brown 32 Teal, Madagascar 32 Teal, Marbled 32 Teal, Salvadori's 32 Teapa, Molly del 80 tectiformis, Discula 124 teegelaari, Labrochromis 184 TEIIDAE 61, 182, 200 Teinopalpus 171, 208 Teinsotoma 209 teita, Cymothoe 253 telegrapha, Hedylepta 186 teleius burdigalensis, Maculinea 252 teleius, Maculinea 170 Telespiza 56 Teleutomyrmex 102 telfairii, Leiolopisma 60 telfordi, Crocidura 7 Telmatherina 79, 243 Telmatobius 67, 201 Telmatabufo 201 Telophorus 49 temmincki, Catopuma 140 temmincki, Pteropus 136 temminckii, Macroclemys 63 temminckii, Manis 142 temminckii, Tragopan 149 Temoleh, 1kan 73 TEMORIDAE 92, 207 tempe, Thestor 104

tenax, Somatogyrus 212 TENEBRIONIDAE 99 tenebrosa, Carelia 189 tenebrosa, Murina 194 tenebrosa, Rhipidura 160 tenebrosus, Phyllastrephus 48 tenella, Auriculella 213 tener, Loriculus 152 tenerifensis, Parmacella 127 teneriffae, Plecotus 13 Tengchiena 215 tennentii, Ceratophora 59 tennesseensis, Phoxinus 168 tennesseensis, Somatogyrus 212 Tenrec, Aquatic 5 Tenrec, Large-eared 241 TENRECIDAE 5, 241 Tenualosa 71 tenuicostata, Sinployea 190 tenuimanus, Cherax 95 tenuirostris, Numenius 38 tenuirostris, Zosterops 54 tenuis, Cottus 206 tenuis, Cracidura 7 tenuis, Myosorex 7 tenuis, Pseudobarbus 73 tenuisculpta, Liardetia 215 tenuispira, Amastra 189 tenuistriata, Diastole 125 Tepelmene, Sardinita de 73 tephropleurus, Zosterops 54 Teramulus 205 TERAPONTIDAE 83, 168, 206, 244, 247 terceirana, Leptaxis 125 terebra, Partulina 213 terebriformis, Anceya 119 Terenura 46 teres, Elimia 117 teres, Gonospira 128 teresinarum, Lucifuga 77 tereticaudus chlorus, Spermophilus 231 teretulus, Phenacobius 73 Tern, Black-bellied 38 Tern, Black-fronted 38 Tern, Damara 150 Tern, Elegant 150 Tern, Fairy 38 Tern, Kerguelen 38 Terpsiphone 53, 160 terrapen felis, Trachemys 246 terrapen, Trachemys 64 Terrapene 64, 166, 200 Terrapin, Diamondback 166 terrapin, Malaclemys 166 Terrapin, Painted 64 Terrapin, River 64 terrestris, Tapirus 141 terrestris, Trugan 151 terrestris, Zoothera 181 terrisi, Rhynchopsitta 41 terryi, Aeschrithmysus 248 tessellata, Partulina 121 tessellatus, Cualac 79 tessellum, Syrichtus 252 testudinalis, Discula 124 TESTUDINES 62, 132, 165, 182, 200, 234, 243, 246

TESTUDINIDAE 65, 166, 182, 200, 234, 243, 246 Testudo 65, 166, 235, 243, 246 tethys, Oceanodroma 146 Tetracentrum 206 Tetracerus 22 tetradactyla, Allactaga 23 tetradactylus sangi, Petrodromus 245 Tetradactylus 59, 182 TETRAGNATHIDAE 88 Tetramorium 102 Tetranesodon 204 Tetrao 149 TETRAODONTIDAE 88, 207 TETRAODONTIFORMES 88, 207 Tetraophasis 149 tetraspis, Osteolaemus 58 tetrax, Tetrax 150 Tetrax 150 tetrica, Discula 124 TETRIGIDAE 109 Tetrix 109 Tettigarcta 251 TETTIGARCTIDAE 251 Tettigidea 109 TETTIGONIIDAE 109, 187 teuszii, Sousa 196 tevoroa, Tridacna 112 texana, Cochliopa 115 texana, Tartarocreagris 207 texanus, Asaphomyia 250 texanus, Haideoporus 248 texanus, Limnebius 249 texanus, Procambarus 95 texanus, Xyrauchen 75 texta, Helix 125 textilis, Amytornis 49 teydea, Fringilla 132 teysmannii, Treron 151 Thaanumella 210 thaanumi, Achatinella 188 thaanumi, Lyropupa 216 thaanumi, Nesopupa 216 thaidina, Bhutanitis 244 thalassina, Cissa 164 Thalassoma 87 thalia, Crocidura 136 thalia, Partula 191 Thallomys 145 Thalurania 44 thamicola, Homaloptera 74 thamnobates, Bradypodion 165 THAMNOCEPHALIDAE 91 Thamnomys 242 Thamnophilus 155 Thamnophis 61, 200, 246 Thapsia 124, 125, 215 Thaumatodon 124, 190 Thaumatogryllus 108 Thaumatoneura 107 Theba 125 thedana, Torresitrachia 122 theinemanni, Neolissochilus 73 theodori, Anas 179 theodorverhoeveni, Papagomys 178 Theodoxus 209 Thepa, Pla 203

THERAPHOSIDAE 169 therasiae, Muscocyclops 132 theresa, Monodelphis 3 thermae, Zaitzeva 249 thermalis, Pyrgulopsis 211 Thermocyclops 132 Thermodiaptomus 92 Thermomesochra 208 thermophilum, Thermosphaeroma 185 Thermophis 61 Thermosphaeroma 97, 185, 244 thermydromis, Speocirolana 97 thero cedarbergae, Phasis 252 Theropithecus 140 Thersites 122 Theskelomensor 125, 256 thessala, Knipowitschia 87 Thessalogovin3/4s 87 Thestor 252 Thestor, Dickson's 252 Thestor, Kaplan's 103 Thestor 103, 104, 170, 252 thetis, Partula 127 THIARIDAE 119, 173 thibaudeaui, Tenualosa 71 thibetana huangensis, Ochotona 233 thibetana sikimaria, Ochotona 233 thibetana, Macaca 129 tkibetanus gedrosianus, Ursus 224 thibetanus, Ursus 18 Thicketbird, Bismarck 198 Thicketbird, Bougainville 198 Thicketbird, Guadalcanal 159 Thicketbird, Long-legged 53 Thinornis 37 Thistletail, Perijá 155 tholloni, Mesoperipatus 209 thomasetti, Gulella 191 thomasi bethune-bakeri, Hemiargus 252 thomasi, Echimys 28 thomasi, Galagoides 241 thomasi, Microgale 5 thomasi, Microtus 144 thomasi, Ochotona 146 thomasi, Presbytis 140 thomasi, Rhinolophus 137 thomasi, Salpingotus 197 thomasi, Sturnira 11 thomasi, Urothemis 209 Thomasomys 145 thomasseti. Nesomantis 68 Thomea 214 thomensis, Columba 38 thomensis, Crocidura 7 thomensis, Estrilda 163 thomensis, Nectarinia 53 thomensis, Paradoxa 213 thomensis, Thyrophorella 217 Thomomys 142, 231, 242 thompsoni, Pyrgulopsis 211 thamseni, Odontodiaptomus 207 thomsoni, Limnotrochus 119 thomsonii albonotata, Gazella 228 thomsonii, Gazella 130 thonglongyai, Craseonycteris 10 Thoopterus 136

thoracatus, Geocapromys 179 THORACICA 208 thoracicus, Charadrius 37 Thornbill, Mountain 132 Thornbill, Slender-billed 49 Thornbird, Chestnut-backed 155 Thorntail, Coppery 198 Thoropa 67 Thrasher, Cozumel 158 Thrasher, White-breasted 49 Thraupis 163 Threeridge, Fat 110 Threskiornis 147 THRESKIORNITHIDAE 31, 147, 179 Thripophaga 45, 155 Throscodectes 109 Thrush, Amami 53 Thrush, Ashy 53 Thrush, Black-breasted 161 Thrush, Bonin 181 Thrush, Chinese 161 Thrush, Everett's 161 Thrush, Fawn-breasted 161 Thrush, Forest 158 Thrush, Grand Cayman 181 Thrush, Grayson's 161 Thrush, Grey-sided 53 Thrush, Izu 53 Thrush, La Selle 53 Thrush, Long-billed 161 Thrush, Makira 161 Thrush, Moluccan 199 Thrush, New Britain 161 Thrush, Orange-banded 161 Thrush, Pied 161 Thrush, Red-backed 161 Thrush, São Tomé 161 Thrush, Slaty-backed 161 Thrush, Somali 53 Thrush, Spot-winged 161 Thrush, Taita 53 Thrush, Tristan 159 Thrush, Unicoloured 161 Thrush, Yemen 53 Thryomanes 158 Thryothorus 49 Thryssa 202 thunbergi, Colophon 99 Thunnus 88, 207, 236, 237 thuragnathus, Harpagochromis 184 thurjii, Hardella 166 thurstoni, Samoana 127 Thylacine 177 THYLACINIDAE 177 Thylacinus 177 Thylamys 135 Thylogale 4 thynnus, Thunnus 207 thynnus, Thunnus 237 Thyrophorella 217 THYROPHORELLIDAE 217 Thyroptera 11 THYROPTERIDAE 11 THYSANURA 254 thysi, Tilapia 86 Tiang 228 tiarella, Geomitra 124 tiassalensis, Neritina 112

tibialis, Anomala 250 tibiospina, Deinacrida 254 tickelli, Anorrhinus 154 Tickellia 160 Tiger 16 Tiger, Amur 224 Tiger, Angled 104 Tiger, Biak 104 Tiger, Bonthain 104 Tiger, Ceylon 171 Tiger, Crow 105 Tiger, Crowley's 244 Tiger, D'Abrera's 104 Tiger, Dannatt's 104 Tiger, David's 104 Tiger, Fat 244 Tiger, Felder's 104 Tiger, Flores 104 Tiger, Javan 171 Tiger, Kirby's 244 Tiger, Kuekenthal's Yellow 104 Tiger, Least 244 Tiger, Manado Yellow 244 Tiger, Milagros' 104 Tiger, Morishita's 104 Tiger, New Ireland Yellow 104 Tiger, Nilgiri 171 Tiger, Sarangani 237 Tiger, Scarce Blue 244 Tiger, South China 224 Tiger, Sumatran 224 Tiger, Sumatran Chocolate 171 Tiger, Sumbawa 104 Tiger, Timor Yellow 104 Tiger, Toxopeus' Yellow 104 Tiger, Weiske's 244 Tiger, Zinken's 171 Tiger-heron, Fasciated 147 tigrellus, Gobius 206 tigrinus, Leopardus 140 tigris altaica, Panthera 224 tigris amoyensis, Panthera 224 tigris sumatrae, Panthera 224 tigris, Panthera 16 Tigrisoma 147 Tijuca 46, 156 Tilapia, Lake Magadi 247 Tilapia, Otjikoto 86 Tilapia 86 Tiliqua 61 timavi, Niphargus 90 timorensis, Ficedula 158 timorensis, Rattus 197 timorica, Parantica 104 timoriensis, Nyctophilus 13 TINAMIDAE 29, 146, 197 TINAMIFORMES 29, 146, 197 Tinamou, Black 197 Tinamou, Choc3/4 29 Tinamou, Colombian 146 Tinamou, Dwarf 29 Tinamou, Hooded 146 Tinamou, Kalinowski's 29 Tinamou, Magdalena 29 Tinamou, Pale-browed 146 Tinamou, Solitary 146 Tinamou, Taczanowski's 29

Tinamou, Tepuí 29

Tinamou, Yellow-legged 146 Tinamus 146, 197 Tinkerbird, White-chested 44 Tinostoma 186 tiomanensis, Sundoreonectes 75 Tiphobia 119 Tiradelphe 105 Tiro 184 Tirumala 105, 208, 237, 244 Tischeria 186 TISCHERIIDAE 186 Tit, Red-throated 161 Tit, White-fronted 161 Tit, White-naped 53 Tit, White-necklaced 161 Tit, White-throated 161 Tit, Yellow 161 Tit-babbler, Grey-faced 159 Tit-babbler, Miniature 51 Tit-spinetail, Araucaria 155 Tit-spinetail, Tawny 155 Tit-spinetail, White-browed 45 Tit-tyrant, Ash-breasted 47 Tit-warbler, Crested 159 titei, Lepidochrysops 103 tithonus, Ornithoptera 208 tithys, Synallaxis 45 Titi, Black-fronted 221 Titi, Masked 14 Titi, Northern Bahian Blond 221 Titi, Northern Masked 221 Titi, Ornate 221 Titi, Southern Bahian Masked 221 titteya, Puntius 132 tityoides, Parantica 171 tlahuacensis, Evarra 183 tlaloci, Rana 182 Toad, Amargosa 66 Toad, Amatola 66 Toad, Black 66 Toad, Cape Mountain 166 Toad, Darwin's 201 Toad, Garo Hill Tree 66 Toad, Golden 66 Toad, Houston 66 Toad, Italian Spadefoot 235 Toad, Malabar Tree 66 Toad, Mt Nimba Viviparous 66 Toad, Puerto Rican Crested 66 Toad, Sonoran Green 166 Toad, Yosemite 66 Toadfish, Cotuero 78 Toadfish, Reticulated 78 Toadfish, Splendid 78 Toadfish, Whitelined 78 Toadfish, Whitespotted 78 Toadlet, Alexandra 201 Toadlet, Bibron's 167 Toadlet, Marbled 182 Toadlet, Red-crowned 167 tobiasi, Hydropsyche 187 tobleri, Euploea 171 toboroi, Papilio 244 TODIDAE 154 Todirhamphus 44, 154, 246 Todirostrum 156, 242 todseni, Sonorella 174 Todus 154

Tody, Narrow-billed 154 Tody-Flycatcher, Buff-cheeked 242 Tody-flycatcher, Maracaibo 156 Tody-tyrant, Boat-billed 156 Tody-tyrant, Buff-breasted 47 Tody-tyrant, Buff-throated 156 Tody-tyrant, Cinnamon-breasted 156 Tody-tyrant, Eye-ringed 156 Tody-tyrant, Hangnest 156 Tody-tyrant, Kaempfer's 47 Tody-tyrant, White-cheeked 156 Tody-tyrant, Zimmer's 156 tohiveana, Partula 191 Tokoweka, South Island 179 tokudae, Mogera 8 tokudae, Pteropus 177 Tokudaia 27 tolotomensis, Roimontis 214 Tolypeutes 5, 136 tomensis, Chaerephon 13 tomentosus, Kunsia 24 tomi, Betta 88 Tomicha 118, 188 Tominanga 79 Tomistoma 199 Tomopeas 13 tomsetti, Cupedora 173 Tonatia 11, 137 Tondanichthys 81 tonkeana hecki, Macaca 245 tonkeana, Macaca 140 Toothcarp, South European 205 Toothcarp, Spanish 205 Toothcarp, Valencia 80 Topi 130, 228 Topi, Coastal 228 Topminnow, Barrens 80 Topminnow, Whiteline 183 topsiae, Beddomeia 115 Tor 74 Torguigener 207 tormentosa, Tettigarcta 251 Tornatellinops 213 Tornelasmias 188 tornieri, Malacochersus 65 Tornigenus 239 torobo, Oloplotosus 76 torosus, Dinornis 179 torquata, Delma 60 torquatus lucifer, Callicebus 241 torquatus medemi, Callicebus 221 torquatus torquatus, Cercocebus 245 torquatus, Bradypus 5 torquatus, Cercocebus 140 torquatus, Cheiromeles 139 torquatus, Pedionamus 36 torrefacta, Leptoxis 118 torrei, Boromys 178 torrentium, Austropotamobius 93 Torreornis 55 torresi, Bibimys 143 Torresitrachia 122, 174, 244 torreya, Cyclocosmia 207 torridus ramona, Onchomys 233 torridus ramona, Onychomys 233 torridus tularensis, Onchomys 233 torridus tularensis, Onychomys 233

torridus, Attila 47 torringtoni, Columba 38 Tortoise, Abingdon Island 234 Tortoise, African Spurred 65 Tortoise, Aldabra Giant 65 Tortoise, Argentine 65 Tortoise, Asian Giant 65 Tortoise, Berger's Cape 65 Tortoise, Bolson 65 Tortoise, Burmese Starred 65 Tortoise, Central Asian 65 Tortoise, Charles Island 234 Tortoise, Chatham Island 234 Tortoise, Desert 65 Tortoise, Duncan Island 234 Tortoise, Eastern Hermann's 246 Tortoise, Egyptian 65 Tortoise, Elongated 65 Tortoise, Galápagos Giant 65 Tortoise, Geometric 65 Tortoise, Gopher 65 Tortoise, Home's Hinge-back 200 Tortoise, Hood Island 235 Tortoise, Iguana Cove 235 Tortoise, Impressed 65 Tortoise, Indefatigable Island235 Tortoise, James Island 234 Tortoise, Madagascar 65 Tortoise, Madagascar Flat-shelled65 Tortoise, Marginated 243 Tortoise, Natal Hinge-back 166 Tortoise, Pancake 65 Tortoise, Radiated 65 Tortoise, Serrated Hinge-back 200 Tortoise, Sierra Negra 235 Tortoise, South American Yellow-footed Tortoise, Speckled Cape 166 Tortoise, Spider 65 Tortoise, Spur-thighed 65, 246 Tortoise, Texas 243 Tortoise, Three-keeled Land 64 Tortoise, Travancore 65 Tortoise, Volcan Alcedo 235 Tortoise, Volcan Darwin 235 Tortoise, Volcan Wolf 234 **TORTRICIDAE 254** torulosa gubernaculum, Dysnomia 255 torulosa gubernaculum, Epioblasma torulosa rangiana, Dysnomia 255 torulosa rangiana, Epioblasma 238 torulosa torulosa, Dysnomia 255 torulosa torulosa, Epioblasma 238 totae, Rhizosomichthys 183 Totoaba 84 Totoaba 84 totta, Serinus 163 Toucanet, Saffron 154 Toucanet, Yellow-browed 154 Touit 41, 152 toweri, Ataeniobius 80 townesi, Stylurus 107 townsendi, Arctocephalus 17 townsendi, Spiza 182 townsendii cowani, Microtus 233 townsendii, Plecotus 13 townsendii, Spermophilus 197

towoeti, Nomorhamphus 81 Toxolasma 112 toxopei, Charmosyna 40 toxopei, Parantica 104 Toxostoma 158 Toxotes 244 TOXOTIDAE 244 trabalis, Villosa 256 Trachemys 64, 166, 246 Trachypithecus 15, 140, 194 Tragelaphus 22, 131, 141, 230 tragocamelus, Boselaphus 130 Tragopan, Blyth's 35 Tragopan, Cabot's 35 Tragopan, Satyr 149 Tragopan, Temminck's 149 Tragopan, Western 35 Tragopan 35, 149 TRAGULIDAE 141, 226 Tragulus 226 tramieri, Chalepoxenus 100 tranquebarica viridissima, Cicindela transfasciatus, Crypturellus 146 transgrediens, Aphanius 79 transitionalis, Sylvilagus 29 translucida, Gulella 216 transmontanus, Acipenser 236 transmontanus, Acipenser 167 transpacificus, Hypomesus 76 transsylvanica, Podismopsis 254 transsylvanicus, Bienkotetrix 109 transvaalensis, Xenocalamus 200 transversalis, Bulinus 113 transversalis, Theodoxus 209 Tras 74 tras, Puntius 74 traski poma, Hysterocarpus 247 trautmani, Noturus 75 traversi, Paryphanta 216 traversi, Petroica 51 Treader-Bug, Aaa Water 251 treculi, Micropterus 206 Tree-finch, Medium 162 Tree-kangaroo, Bennett's 135 Tree-kangaroo, Doria's 4 Tree-kangaroo, Goodfellow's 4 Tree-kangaroo, Grizzled 193 Tree-kangaroo, Huon 4 Tree-kangaroo, Lowland 193 Tree-kangaroo, Lumboltzi's 135 Tree-kangaroo, Scott's 4 Tree-nymph, Bedford-Russell's 104 Tree-nymph, Ceylon 171 Tree-nymph, Electra's 104 Tree-nymph, Hewitson's Small 104 Tree-Nymph, Malabar 171 Tree-Nymph, Seram Small 244 Treepie, Andaman 164 Treepie, Hooded 58 Treepie, White-bellied 164 Treerunner, Beautiful 155 Tremarctos 18 Treron 39, 151 treurensis, Barbus 132 trevelyani, Barbus 71 trevelyani, Chrysospalax 5

trevori, Mops 139 Triaenodes 187 Triaenops 11 Tribolonotus 200 tricarinata, Melanochelys 64 tricarunculata, Procnias 46 tricellulare, Heteragrion 107 Trichastoma 53, 160 TRICHECHIDAE 19, 225 Trichechus 19, 225 Trichia 215 Trichocichla 53 Trichoglossus 41 TRICHOMYCTERIDAE 76, 168, 183, Trichomycterus 76, 168, 204 trichonica, Cobitis 203 trichonis, Economidichthys 87 TRICHONISCIDAE 97, 237 TRICHOPTERA 187, 254 trichopus, Zygogeomys 23 Trichosurus 219 trichotis, Allocebus 13 trichotis, Chibchanomys 143 Trichotoxon 215 tricinctus, Tolypeutes 5 TRICLADIDA 192, 256 Triclaria 41 tricolor, Alectrurus 156 tricolor, Ara 180 tricolor, Lyriothemis 107 Tricula 119 Tridacna 112, 133, 244 TRIDACNIDAE 112, 133, 244 tridactyla, Jacamaralcyon 44 tridactyla, Myrmecophaga 5 tridactylus tridactylus, Potorous 219 tridecemlineatus alleni, Spermophilus tridentata ssp., Lampetra 246 tridentatus, Tachypleus 209 tridentifera, Eurycea 68 tridonata, Triaenodes 187 trifasciata, Cuora 64 trifasciatus, Nesomimus 49 Triggerfish, Queen 88 triglavensis, Pseudomoraria 96 trigonelia, Pseudocandona 98 Trigonopelastes 250 Trigonoscuta 185, 248 trijuga, Melanochelys 200 Triller, Samoan 157 trimaculatus, Hephaestus 206 trimaculatus, Hippocampus 82 trimeni southeyae, Aloeides 252 trimeni, Poecilmitis 103 Trimenia 104 Trimeresurus 62, 200 Trimerotropis 108 Tringa 38 Trinidad, Cachorrito de la 183 trinitatis, Hypolestes 107 trinotatus orarius, Zapus 232 triochilus, Raphiomydas 250 Triodopsis 215 Triok, Tate's 5 TRIONYCHIDAE 65, 166, 200, 235

Trionyx 235 TRIOPSIDAE 97 tripartitus, Saguinus 241 triplex, Ephemera 250 Triplophysa 75 triporcatus, Staurotypus 166 tripunctata, Euplaea 104 triquetra, Dysnomia 255 trisella, Etheostoma 83 triserrata, Cylindraspis 182 Trissexodon 245 tristis, Partula 191 tristrami, Oceanodroma 146 Trithemis 107 Tritocleis 186 Triturus 132, 201 triunguis, Trionyx 235 trivialis, Pyrgulopsis 211 trivirgata trilineata, Arctogalidia 224 trivittata, Kachuga 64 trocaz. Columba 132 trochearis, Bellamya 120 Trochidrobia 117, 173 trochiformis, Beddomeia 115 TROCHILIDAE 43, 153, 181, 198 Trochochlamys 124 Trochogyra 214 Trochoidea 126, 175, 190, 256 trochoideum, Craspedoma 133 Trochomorpha 128, 175, 217 Trochozonites 215 TROGIDAE 250 Troglocaris 93 troglocataractus, Nemacheilus 74 Troglocobitis 203 troglodytes schweinfurthi, Pan 223 troglodytes troglodytes, Pan 223 troglodytes verus, Pan 223 troglodytes, Aphodius 250 troglodytes, Monadenia 215 troglodytes, Pan 16 Troglodytes 49 TROGLODYTIDAE 49, 158 Troglaglanis 75 Troglohyphantes 88 Trogon, Baird's 153 Trogon, Hispaniolan 153 Trogon, Ward's 44 Trogon 153 TROGONIDAE 44, 153 TROGONIFORMES 44, 153 Tragapterus 22 Troides 105, 171, 253 Troik, Great-tailed 5 troostiana, Elimia 117 tropica, Bettongia 4 tropicalis, Geomys 22 tropicalis, Monachus 178 Trapidophora 118, 188, 212 Tropidophoxinellus 203 Tropidoptera 121 Tropidurus 199 Tropocyclops 92 Tropodiaptomus 92, 185, 207 troschelianum, Pleurobema 112 troughtoni, Taphozous 10 Trout, Apache 77

Trout, Bull 77 Trout, Cutthroat 247 Trout, Gila 77 Trout, Iwame 204 Trout, Mexican Golden 77 Trout, Silver 183 Trox 250 truchnasi, Nanoplectrus 255 truei, Podogymnura 6 Trugon 151 trukana, Trukcharopa 214 Trukcharopa 214 truncata, Lyropupa 216 Truncatella 212 TRUNCATELLIDAE 212 Truncatellina 128, 217 truncatus, Cambarus 93 truncatus, Chlamyphorus 5 truncatus, Ospatulus 73 truncatus, Tursiops 196 Truncilla 255 trybomi, Coregonus 204 tryoni, Xerarianta 125 Tryonia, Amargossa 212 Tryonia, Brune's 212 Tryonia, Gila 212 Tryonia, Grated 212 Tryonia, Koster's 212 Tryonia, Mimic 212 Tryonia, Minute 212 Tryonia, Phantom 212 Tryonia, Point of Rocks 212 Tryonia, Quitabaquito 212 Tryonia, Sportingoods 212 Tryonia 212 Tryphamys 27 tschaiyssuensis, Nemacheilus 74 tschapecki, Bythiospeum 115 tschudii, Ampelioides 156 Tsessebe 228 Tsitana 252 tsolovi, Calomyscus 143 Tuatara, Brother's Island 58 Tuatara, Cook Strait 243 Tubercled-blossom 255 tuberculata, Cyclonaias 172 tuberculata, Insulivitrina 175 tuberculata, Mystacina 13 tuberculatum, Heteropoma 210 tuberculatus, Chalinolobus 138 tuberculatus, Hadramphus 185 tuberculatus, Pteropus 10 tuberculasus, Pedastibes 66 tuberosa, Quadrula 112 TUBIFICIDAE 110 Tubuaia 125 tucinkae, Eubucco 154 Tucuxi 196 tuerosi, Laterallus 36 tularosa, Cyprinodon 80 Tulotoma 213 Tulotama 213 tumana, Lednia 254 Tumba 74 tumba, Puntius 74 tumbalensis, Tylomys 27

tumida, Pilsbrycharopa 123 tumidifrons, Natalus 11 tumidula, Omphalotropis 210 tumidulus, Jokajdon 214 tumuloides, Libera 189 tumultuosos, Alsodes 201 Tuna, Albacore 207, 236 Tuna, Bigeye 88, 236 Tuna, Northern Bluefin 207, 237 Tuna, Southern bluefin 88 tunnevi, Rattus 145 Tupaia 8 **TUPALIDAE 8** Tur, East Caucasian 21 Tur, West Caucasian 21 Turaco, Bannerman's 42 Turaco, Fischer's 152 Turaco, Prince Ruspoli's 42 Turacoena 39 turatii, Laniarius 157 TURBELLARIA 192, 256 turbinata, Westraltrachia 123 turbinatus Biolocus, Tornigenus 239 TURBINIIDAE 112 turbotti, Anagotus 248 Turcinemacheilus 203 turcosus, Cyornis 158 Turdoides 53, 160 Turdus 53, 161, 181 Turgenitubulus 122, 256 Turgid-blossom 255 turgida, Achatinella 120 turgida, Partula 191 turgidula, Dysnamia 255 turgidula, Epioblasma 111 turgidula, Gonospira 128 turgidula, Streptostyla 215 Turkey, Ocellated 149 Turnagra 181 turnerae, Beddomeia 115 turneri, Eremomela 50 turneri, Hubbsina 80 turneri, Posorites 174 TURNICIDAE 35, 149 Turnix 35, 149 turpis, Hippasideros 10 turricula, Carelia 189 turricula, Discula 124 TURRIDAE 213 turriplana, Gittenbergeri 245 turritella, Fontigens 116 turritum, Heteropoma 210 Tursiops 196 turskyi, Leuciscus 183 Turtle, African Softshell 235 Turtle, Alabama Red-bellied 64 Turtle, Alligator Snapping 63 Turtle, American Red-bellied 166 Turtle, Annam Leaf 243 Turtle, Aquatic Box 64 Turtle, Arakan Forest 64 Turtle, Asian Giant Softshell 66 Turtle, Asiatic Softshell 65 Turtle, Assam Roofed 200 Turtle, Barbour's Map 165 Turtle, Beal's-eyed 64 Turtle, Bellinger River Snapping 200

tumida, Beddomeia 188

Turtle, Big-headed 200 Turtle, Big-headed Amazon River 64 Turtle, Black Soft-shell 65 Turtle, Black Wood 166 Turtle, Black-knobbed Map 166 Turtle, Blanding's 165 Turtle, Bog 64 Turtle, Brazilian Radiolated Swamp 165 Turtle, Brazilian Snake-necked 62 Turtle, Brisbane Short-necked 243 Turtle, Brown Wood 166 Turtle, Burmese Eyed 166 Turtle, Burmese Flapshell 200 Turtle, Burmese Roofed 64 Turtle, Cagle's Map 64 Turtle, Cat Island Freshwater 246 Turtle, Central American River 63 Turtle, Chaco Side-necked 62 Turtle, Chaco Swamp 62 Turtle, Chinese False-eyed 200 Turtle, Chinese Stripe-necked 166 Turtle, Chinese Three-striped Box 64 Turtle, Cochin Forest Cane 64 Turtle, Common Box 166 Turtle, Creaser's Mud 166 Turtle, Crowned River 166 Turtle, Dahl's Toad-headed 62 Turtle, Dunn's Mud 64 Turtle, Escambia Map 166 Turtle, Euphrates Softshell 66 Turtle, European Pond 165 Turtle, Fitzroy River 62 Turtle, Flattened Musk 64 Turtle, Four-eyed 64 Turtle, Fujian Pond 200 Turtle, Giant Asian Pond 166 Turtle, Giant Musk 166 Turtle, Green 63, 234 Turtle, Hawksbill 63 Turtle, Hoge's Sideneck 62 Turtle, Inagua Island 246 Turtle, Indian Black 200 Turtle, Indian Eyed 166 Turtle, Indochinese Box 165 Turtle, Large-nosed Wood 166 Turtle, Leith's Softshell 166 Turtle, Madagascan Big-headed64 Turtle, Magdalena River 65 Turtle, Malayan Flat-shelled 200 Turtle, Malaysian Giant 166 Turtle, Manning River Snapping 200 Turtle, Mary River 62 Turtle, McCord's Box 200 Turtle, Mexican Musk 166 Turtle, Mexican Spotted Wood 64 Turtle, Namoi River Snapping 62 Turtle, Narrow-breasted Snake-necked 165 Turtle, Narrow-bridged Mud 64 Turtle, Narrow-bridged Musk 166 Turtle, Narrow-headed Softshell 65 Turtle, Nubian Flapshell 166 Turtle, Oaxaca Mud 166 Turtle, Ornate Box 166 Turtle, Pacific Pond 64 Turtle, Pan's Box 200 Turtle, Pantanal Swamp 165 Turtle, Parker's Snake-necked62 Turtle, Pascagoula Map 166

Turtle, Philippen's Striped 200 Turtle, Philippine Pond 64 Turtle, Pig-nose 62 Turtle, Pritchard's Snake-necked62 Turtle, Red Side-necked 165 Turtle, Red-crowned Roofed 64 Turtle, Red-headed River 65 Turtle, Red-necked Pond 200 Turtle, Reimann's Snake-necked 200 Turtle, Ringed Map 64 Turtle, Roti Island Snake-necked62 Turtle, Ryukyu Leaf 64 Turtle, Senegal Flapshell 166 Turtle, Seychelles Mud 65 Turtle, Six-tubercled River 65 Turtle, Sonora Mud 64 Turtle, South American River 132 Turtle, South Asian Box 165 Turtle, Spiny 64 Turtle, Spiny-neck 165 Turtle, Spotted 64 Turtle, Spotted Box 200 Turtle, Spotted Pond 165 Turtle, Striped Narrow-headed Softshell Turtle, Sulawesi Forest 200 Turtle, Tabasco Mud 166 Turtle, Texas Map 166 Turtle, Three-striped Roof 166 Turtle, Turkana Mud 65 Turtle, Upemba Mud 200 Turtle, Vanderhaege's Toad-headed165 Turtle, Wattle-necked Softshell 166 Turtle, Western Swamp 62 Turtle, Wood 64 Turtle, Yellow-blotched Map 64 Turtle, Yellow-headed Box 200 Turtle, Yellow-headed Temple 64 Turtle, Yellow-margined Box 64 Turtle, Yellow-spotted River 65 Turtle, Yunnan Box 200 Turtle, Zambezi Flapshell 166 Turtle, Zhou's Box 200 Turtle, Zulia Toad-headed 62 turtoni, Chilonopsis 192 turtoni, Nesopupa 191 turtoni, Unio 209 tuscumbia, Etheostoma 83 Tuxentius 252 tyberinus, Barbus 167 tyleriana, Marmosa 193 Tylognathus 203 Tylomys 27, 145 tylorhinus, Pappogeomys 142 tympanistrigus, Pycnonotus 48 Tympanocryptis 234 Tympanoctomys 28 tympanum marnieae, Eulamprus 234 tympanum ssp., Eulamprus 246 Typhaeus 249 Typhlatya 93 Typhleatris 87 Typhliasina 77, 247 Typhlichthys 77 Typhlobarbus 74 Typhlogarra 74 Typhlomolge 68 Typhlomys 27

TYPHLOPIDAE 62, 182 typhlops, Iranocypris 72 typhlops, Notaryctes 4 typhlops, Protocobitis 74 typhlops, Stygichthys 203 Typhlops 62, 182 Typhlosaurus 61 Typhlosynbranchus 205 Typhlotriton 201 typica, Coracina 48 typicus, Gerrhosaurus 165 typus, Otoniys 144 typus, Rhincodon 201 TYRANNIDAE 47, 156, 242 Tyrannulet, Alagoas 47 Tyrannulet, Bay-ringed 156 Tyrannulet, Grey-capped 156 Tyrannulet, Minas Gerais 47 Tyrannulet, Oustalet's 156 Tyrannulet, Reiser's 156 Tyrannulet, Restinga 47 Tyrannulet, São Paulo 47 Tyrannulet, Serra do Mar 156 Tyrannus 47 Tyrant, Cock-tailed 156 Tyrant, Shear-tailed Grey 156 Tyrant, Strange-tailed 47 Tyrant, Tumbes 156 Tyrrheniella 126 tytleri, Phylloscopus 160 Tyto 42, 152, 198 TYTONIDAE 42, 152, 198 tytonis, Chlorotalpa 5 Uakari, Bald 14 Uakari, Black 241 ucayalae, Simoxenops 155 ucayalensi, Scolomys 27 uchidai, Neoscaptor 8 udzungwensis, Galagoides 194 udzungwensis, Xenoperdix 35 Uegitglanis 76 uenoi, Rhinocypha 106 ukliva, Leuciscus 72 Ula-ai-hawane 181 ulietanus, Cyanoramphus 180 ultima, Crocidura 7 ultima, Telespiza 56 ultramarina, Vini 42 ultramontanum, Pisidium 256 Uma 60 umbargae, Argiocnemis 106 umbilicata, Amastra 189 umbilicata, Lithoglyphus 188 umbilicata, Partula 191 umbilicata, Phrantela 116 umbilicata, Pyrgina 214 umbilicatus, Neoplanorbis 113 Umbra 76 umbratus, Platyrrhinus 137 Umbrellabird, Bare-necked 46 Umbrellabird, Long-wattled 46 **UMBRIDAE 76, 168** umbrina, Pseudemydura 62 umbrinus emotus, Thomomys 242 umbrinus nevadensis, Tamias 231 umbrinus sedulus, Tamias 231 umbrinus, Thomomys 142

unalascensis stevensoni, Dicrostonyx 232 unalascensis unalascensis, Dicrostonyx unappendiculatus, Casuarius 29 Unas 248 uncatus, Semperdon 214 uncia, Uncia 16 Uncia 16 underwoodi, Eumops 139 Underwoodisaurus 165 undulata, Chlamydotis 242 undulatus, Cheilinus 87 undulatus, Zebrilus 147 unestami, Cambarus 94 Unga 86 unicolor, Chamaepetes 149 unicolor, Corvus 58 unicolor, Crotalus 62 unicolor, Cyanoramphus 40 unicolor, Mesitornis 35 unicolor, Myrmotherula 46 unicolor, Obovaria 172 unicornis, Rhinoceros 226 unicornis, Pauxi 34 unicornis, Rhinoceros 19 unidentata, Gulella 216 unifasciatus, Bulimulus 126 unifilis, Podocnemis 65 unilamellata, Mautodontha 189 Unio 172, 187, 209, 256 UNIONIDAE 110, 133, 172, 187, 209, 238, 255 UNIONOIDA 110, 133, 172, 187, 209, 238, 255 uniplicata, Auriculella 188 unipunctata, Rhyacophila 255 unirufus, Centropus 152 unistriata, Monodelphis 3 universitatis, Camponotus 100 upembae, Pelusios 200 Uperoleia 182, 201 Upucerthia 155 uralensis, Formica 170 Uramphisopus 97 urania, Macromia 106 uranidea, Percina 169 uranoscopus, Gobio 202 Uranothauma 252 urartensis, Calomyscus 143 Uratelornis 44 Urchin, European Edible Sea 169 urguessensis subangulata, Tayloria 240 Urial, Afghan 230 Urial, Bukhara 230 Urial, Ladahk 230 Urial, Mouflon, 21 Urial, Punjab 230 Urial, Severtzov's 230 Urial, Transcaspian 230 Urocissa 58, 164 Urocyon 129 Urogale 8 Uroglaux 198 Uromys 27, 145 urophtalmus ericymba, Cichlasoma

urophthalmus, Acanthacobitis 132 Uropsilus 8 uropygialis, Zosterops 162 Urosphena 161 urospinosus, Euastacus 96 urosticta, Myrmotherula 46 urostrictus, Engaeus 96 Urothemis 209 URSIDAE 17, 129, 195, 224 ursina, Lichnanthe 250 ursinii moldavica, Vipera 234 ursinii rakosiensis, Vipera 234 ursinii, Vipera 62 ursinus ursinus, Vombatus 219 ursinus, Ailurops 193 ursinus, Callorhinus 17 ursinus, Dendrolagus 193 ursinus, Melursus 18 ursinus. Paruromys 25 ursulae, Nectarinia 161 Ursus 18, 129, 224 urubambensis, Asthenes 155 usagarica msambaa, Gulella 240 usagarica satura, Gulella 240 usambarae, Charaxes 253 usambarae, Crocidura 7 usambarae, Uranothauma 252 usambarense, Atrichotoxon 215 usambarense, Ptychotrema 216 usambarensis, Thapsia 215 usambarensis, Edentulina 216 usambarensis, Gonaxis 216 usambarensis, Trochozonites 215 usambarica, Gulella 216 usambarica, Hypolysia 217 usambarica, Subulina 217 usdagalun, Lirceus 97 Ushimotsugo 246 usingeri, Pseudopsectra 254 ussheri, Scotopelia 42 ussuriensis. Murina 12 ustulata, Baetica 109 ustulata, Partulina 213 ustulatus, Bulimulus 126 Utabaenetes 108 utahensis. Chaetarthria 249 utahensis, Hydroporus 248 utahensis, Limnebius 249 utahensis, Physella 113 utahensis, Stagnicola 113 utahensis, Valvata 213 uvula, Gonospira 128 vae. Felovia 27 vagans, Conacmella 210 valachicus, Niphargus 90 Valencia 80 valeriae, Pristidactylus 199 valgum, Macrobaenetes 108 valida, Achatinella 188 validirostris, Lonius 157 validus, Dendrohyrax 19 valleculus, Hobbseus 94 Vallonia 175, 217 VALLONIIDAE 128, 175, 217 valobushensis, Hobbseus 94 valsanicola, Romanichthys 84 Valvata, Utah 213

Valvata 119, 213 VALVATIDAE 119, 213 Vampyressa 11, 137 Vampyrum 137 vana, Lonchura 57 vancouverensis, Marmota 22 Vandeleuria 27 vanderbilti, Malacocincla 51 vanderhaegei, Phrynops 165 vandeuseni, Stenomys 27 Vanellus 37, 150, 180 Vanga, Bernier's 49 Vanga, Helmet 157 Vanga, Pollen's 49 Vanga, Van Dam's 49 VANGIDAE 49, 157 vanheurni, Melanotaenia 205 vanhyningi, Cincinnatia 115 vanuxemiana, Elimia 117 vanzoi, Cnemidophorus 61 vanzolinii, Alsodes 201 vanzolinii, Saimiri 15 Vaona 203 Vaquita 18 VARANIDAE 61, 243, 246 Varanus 61, 243, 246 vardarensis, Cobitis 203 vardoni, Kobus 131 Varecia 14, 220 varia, Neotoma 25 varia, Partula 127 varia, Tangara 163 Varia 83 variabilis, Oreochromis 85 variabilis, Partula 191 variabilis, Partulina 121 varians, Elimia 117 variata, Elimia 212 varicosa, Alasmidonta 209 varicosa, Alismodonta 255 variegata rubra, Varecia 220 variegata variegata, Varecia 220 variegata, Mesitarnis 35 variegata, Mogurnda 87 variegata, Nannoperca 82 variegata, Tryonia 212 variegata, Varecia 14 variegaticeps, Alcippe 49 variegatus, Dicranopselaphus 249 variegatus, Thaumatogryllus 108 variumbilicata, Rhysoconcha 123 varius, Caconemobius 108 varius, Fregilupus 182 vascoana, Deroceras 173 vasconica, Cryptazeca 174 vasta, Hyla 66 vaterifloris, Rasbara 132 vaughani, Acrocephalus 49 vaughani, Zosterops 162 vectensis, Nematostella 128 vegetus, Oligoryzomys 144 vejdorskyi, Arion 213 velascoi, Pyrenaearia 175 velata, Brazieria 217 velatus, Histiotus 138 velifer, Astatotilapia 84 vellerosus, Colobus 15

velox, Potamogale 5 velox, Vulpes 129 velozi, Plagiodontia 179 venaticus, Speothos 16 venator, Prognathochromis 85 venatrix, Adetomyrma 99 Vendace 204 vendia, Plentusia 174 VENEROIDA 112, 133, 173, 244, 256 venezuelae, Neusticomys 25 venezuelanus, Phylloscartes 156 venezuelensis, Diglossa 54 Veniliornis 155 ventralis, Amazona 151 ventralis, Buteo 148 ventralis, Tadarida 139 venus, Leto 252 venusta, Chloropsis 157 venusta, Glironia 3 venustus, Telmatobufo 201 venustus, Thamnomys 242 vepreculae, Hemisaga 109 Verde, Bagre de Rio 75 Verde, Sardinita de Rio 72, 73 verecundus, Cyprinodon 80 verheyeni, Mastomys 144 veritas, Milyeringa 206 vermeilipinnis, Scaturiginichthys 79 vermiculosa, Leiostyla 127 Vermivora 56, 163 vernalis, Archaeophylax 255 Vernaya 27 vernayi, Dendromus 23 vernoni, Helenodiscus 189 veronicae, Cyprinodon 80 verreauxi coquereli, Propithecus 221 verreauxi coronatus, Propithecus 221 verreauxi deckeni, Propithecus 221 verreauxi verreauxi, Propithecus 221 verreauxi, Coua 152 verreauxi, Propithecus 14 verreauxii alpina, Litoria 235 verreauxii, Litoria 243 verrucosa, Eunicella 128 verrucosa, Lithasia 118 verrucosus. Sus 20 versa, Graptemys 166 verschureni, Malacomys 242 versicolor, Amazona 40 versicolor, Columba 180 versicolor, Ergaticus 163 versicolor, Geotrygon 151 versicolor, Mayrornis 51 vertebralis, Rana 243 verticalis, Prioniturus 41 verticornis, Epigomphus 107 VERTIGINIDAE 128, 133, 175, 192, 217, 245 Vertigo 133, 175, 217 vertreesi, Ceraclea 254 vertreesi, Ochrotrichia 254 verum, Pleurobema 112 verus, Procolobus 140 vervierii, Palacanthilhiopsis 116 vesontiana, Bythinella 173 Vespericola 215

Vespertilio 13

VESPERTILIONIDAE 11, 137, 177, 194, VESPIDAE 251 vestitus, Phalanger 4 vestitus, Sphiggurus 28 veteranus, Cambarus 94 vetiprovidentiae, Poecilio 205 vetula, Balistes 88 vetula, Muscipipra 156 vetulus, Dusicyon 195 vetulus, Pteropus 136 vetulus, Trachypithecus 15 vetusa, Leptaxis 125 vexillarius, Paraxerus 22 vexillifer, Lipotes 19 vicina, Meliphaga 199 Victaphanta 127, 175 Victodrobia 117, 173 victori, Lepidochrysops 103 victoria, Acanthaeshna 105 victoria, Goura 39 victoriae, Lamprolia 51 victoriae, Paralabidochromis 85 victoriae, Ploceus 199 victoriae, Sitta 53 victoriana, Setobaudinia 174 victorianus, Horpagochromis 184 victoriensis, Victodrobia 173 victus, Oligoryzomys 25 vicugna mensalis, Vicugna 226 vicugna vicugna, Vicugna 226 vicugna, Vicugna 130 Vicugna 130, 226 Vicuña 130 Videna 217 Vidumelon 122 Viejo, Meo 168 vigil, Buceros 154 vignoniana, Achatina 213 viguieri, Dacnis 162 vilasboasi, Pipra 47 villaviscensio, Campylopterus 153 Villosa 256 villosa, Nesocryptias 251 villoso, Sitta 161 Villosa 256 villosus, Chrysospalax 5 Vily 205 Vimba 74 vinacea, Amazona 40 vinaceigula, Egretta 31 vincens, Dicaeum 161 vincenti, Chironius 61 vincenti, Paraxerus 22 vincta, Leiostyla 245 Vini 41, 42 vinogradovi, Dicrostonyx 23 vinsoni, Nycteris 10 violacea, Lambis 212 Viper, Armenian 243 Viper, Caucasian 62 Viper, Cyclades Blunt-nosed 62 Viper, Latifi's 62 Viper, Orsini's 234 Viper, Transcaucasian Long-nosed246 Vipera 62, 234, 243, 246 VIPERIDAE 62, 200, 234, 243, 246

vipio, Grus 36 virata, Lagonosticta 163 virens, Valvata 119 virens, Xyrichtys 87 Vireo, Black-capped 56 Vireo, Blue Mountain 163 Vireo, Choc3/4 56 Vireo, Dwarf 163 Vireo, Noronha 56 Vireo, San Andrés 56 Vireo, Slaty 163 Vireo 56, 163 Vireolanius 163 VIREONIDAE 56, 163 virescens, Lampsilis 111 virgata, Leptoxis 118 virgata, Sterna 38 virgatus, Garrulax 159 virginianus clavium, Odocoileus 227 virginianus leucurus, Odocoileus 227 virginianus, Polygyriscus 215 virginiensis, Artogeia 253 virgo, Rhinolophus 137 virgulata, Partulina 213 viridans, Achatinella 120 viridanum, Todirostrum 156 viride, Windbalea 109 viridicata, Pyrrhura 41 viridifacies, Erythrura 57 viridigenalis, Amazona 40 viridis, Aeshna 171 viridis, Androphobus 198 viridis, Bythinella 115 viridis, Cochoa 158 viridis, Elaphrus 98 viridis, Eunice 209 viridis, Heterocrossa 252 Viridonia 56, 181 visagiei, Chrysochloris 5 Visorbearer, Hooded 153 Visorbearer, Hyacinth 153 vitellina, Dendroica 163 vitellina, Geocrinia 67 vitellinus, Rheobatrachus 67 vitianus, Ogmodon 62 vitiensis, Brachylophus 59 vitiensis, Platymantis 67 vitrea, Paludinella 211 Vitrea 128, 217 VITRINIDAE 128, 175, 245 Vitrinula 189 vitta, Mogurnda 87 vittata, Amazona 40 vittata, Lepidomeda 72 vittata, Leptoxis 118 vittata, Lerista 60 vittata, Partula 191 vittatus, Prognathochromis 185 vitulina mellonae, Phoca 224 vitulina stejnegeri, Phoca 242 Viverra 18 VIVERRIDAE 18, 195, 224 viverrinus, Dasyurus 135 viverrinus, Prionailurus 140 vivesi, Myotis 13 vivipara pannonica, Lacerta 234 VIVIPARIDAE 119, 173, 213

viviparus, Girardinichthys 80 Viviparus 173 vladykovi, Eudontomyzon 167 vociferoides, Haliaeetus 33 voeltzkowi, Pteropus 10 VogelkopTree-kangaroo 193 volans goldmani, Glaucomys 245 volans guerreroensis, Glaucomys 245 volans oaxacensis, Glaucomys 245 volans, Cynocephalus 8 volans, Pteromys 142 Vole, Alexander Islands Long-tailed232 Vole, Alexander Islands Tundra 232 Vole, Amak Tundra 232 Vole, Amargosa 232 Vole, Ash Meadows Montane 232 Vole, Balkan Snow 143 Vole, Bavarian 178 Vole, Beach 242 Vole, Big Horn Montane 232 Vole, Cabrera's 144 Vole, Chihuahua 245 Vole, Cody Mountain 232 Vole, Florida Saltmarsh 232 Vole, Hall Island Insular 232 Vole, Hualapai 232 Vole, Insular 197 Vole, Labrador Rock 232 Vole, Mojave River 232 Vole, Montague Tundra 232 Vole, Mount Graham Long-tailed 232 Vole, Pahranagat Valley Montane 232 Vole, Potholes Meadow 232 Vole, Punuk Islands Tundra 232 Vole, Revillagigedo Island Red-backed 232 Vole, Root 144 Vole, San Bernardino Long-tailed 232 Vole, Shumagin Islands Tundra 232 Vole, Snow 143 Vole, Southern Rock 232 Vole, Southern Water 143 Vole, St Lawrence Island Tundra 232 Vole, St Matthew Island Insular 232 Vole, Stephen's California 232 Vole, Tatra 144 Vole, Triangle Island 233 Vole, Wakayama Red-backed 26 Vole, White-footed 197 Volemys 27, 145 volgensis, Stizostedion 206 volitans, Pegasus 205, 236 volutina, Stonemyia 185 Volvarina 213 VOMBATIDAE 4, 219 Vombatus 219 voratus, Brotomys 178 Vorniela 224 vortex, Oreohelix 126 vorticella, Ctenophila 124 vosmaeri, Cylindraspis 182 vosseleri, Bubo 42 vosseleri, Gonaxis 216 vulcani, Mus 144 vulcanorum, Collocalia 43 vulcanorum, Sylvisorex 241 vulgaris, Sciurus 142 vulnerata, Myzomela 162

vulpecula hyopoleucus, Trichosurus Vulpes 129, 195 vulpina, Achatinella 120 vulpinus, Juscelinomys 24 Vulture, Cinereous 148 Vulture, Long-billed 148 Vulture, Red-headed 148 Vulture, White-rumped 148 waccamawensis, Elliptio 255 waccamensis, Fundulus 80 waddelli, Babax 158 wagneri, Catagonus 20 wagneri, Vipera 62 wahjui, Telmatherina 79 wahkeena, Nemours 254 wahnesi, Parotia 58 waianensis, Nesopupa 216 waigiuensis, Salvadorina 32 waimatense, Oligosoma 61 wakensis. Gallirallus 180 waldeni, Aceros 44 waldenii, Dicrurus 58 walia, Capra 21 walkeri, Gyrotoma 118 walkeri, Liolaemus 199 walkeri, Medionidus 111 walkeri, Nyctophilus 139 walkeri, Pleurocera 118 walkeri, Potamonectes 249 walkeriana, Helminthoglypta 125 Wallaby, Bridled Nailtail 4 Wallaby, Crescent Nailtail 177 Wallaby, Parma 135 Wallaby, Tamar 220 Wallaby, Tammar 220 Wallaby, Toolache 177 Wallaby, Western Brush 135 wallacei, Megapodius 34 wallacei, Styloctenium 136 wallacii, Habroptila 36 wallacii, Semioptera 164 Wallaroo, Black 135 wallengrenii, Trimenia 104 walleri, Litocranius 131 wallichi, Catreus 34 wallicus, Pezoporus 242 Walrus, Laptev 224 waltoni, Elliptio 110 waltoni, Oreohelix 126 wanamensis, Glossolepis 78 wani, Streptostyla 215 Wapiti, Alashan 226 wapiti, Etheostoma 83 Warbler, Aquatic 49 Warbler, Bachman's 56 Warbler, Black-capped Rufous 50 Warbler, Broad-billed 160 Warbler, Cape Verde 49 Warbler, Chatham Islands 159 Warbler, Colima 163 Warbler, Dja River 198 Warbler, Elfin-woods 163 Warbler, Golden-cheeked 55 Warbler, Grey-headed 55 Warbler, Grey-throated 163 Warbler, Kirtland's 55

Warbler, Mrs Moreau's 52 Warbler, Papyrus Yellow 50 Warbler, Pink-headed 163 Warbler, Pirre 163 Warbler, Rand's 160 Warbler, Rodrigues 50 Warbler, Santa Marta 163 Warbler, Semper's 56 Warbler, Seychelles 50 Warbler, Shade 158 Warbler, Vitelline 163 Warbler, Whistling 55 Warbler, White-lored 163 Warbler, White-winged 56 Warbler, Yellow-vented 160 Warbler, Yemen 52 Warbling-finch, Cinereous 163 Warbling-finch, Plain-tailed 55 Warbling-finch, Rufous-breasted 55 wardi, Blarinella 136 wardi, Harpactes 44 wardi, Pseudobias 160 wardi, Psittacula 181 wardii, Zoothera 161 warnerensis, Catostomus 75 warreni, Diploglossus 164 Warthog, Cape 226 Warthog, Eritrean 226 Warthog, Somali 226 Wartyback, White 111 washingtoni, Spermophilus 22 Wasp, Antennal-waving 170 Wasp, Antioch Mutillid 251 Wasp, Antioch Sphecid 251 Wasp, Bidecoratus Sphecid 251 Wasp, Brown Cross Sphecid 251 Wasp, Giffard's Sphecid 251 Wasp, Haleakala Sphecid 251 Wasp, Hawaiian Sphecid 251 Wasp, Kauai Sphecid 251 Wasp, Nihoa Eupelmus 251 Wasp, Nihoa Sclerodermus 251 Wasp, Niihau Vespid 251 Wasp, Puna Sphecid 251 Wasp, Redheaded Sphecid 251 Wasp, Shade-winged Sphecid 251 Wasp, Short-foot Sphecid 251 Wasp, Soror Vespid 251 Water-rat, False 27 Water-redstart, Luzon 52 Waterbuck 130 Waterbuck, Defassa 229 Waterbuck, Ellipsen 229 waterhouseae, Beddomeia 115 watermayeri, Syngnathus 82 watersi, Sarothrura 37 waterstradti, Prioniturus 41 watkinsi, Incaspiza 162 wattii, Vidumelon 122 Wattle-eye, Banded 52 Wattle-eye, White-fronted 160 wattsi, Maxomys 24 wattsi, Pipistrellus 139 watuliki, Aethiothemis 208 wawona, Atractelmis 249 wawrai, Belgrandiella 115 Waxbill, Anambra 57 Waxbill, Black-lored 57

Waxbill, Cinderella 163 Westriplectes 255 Waxwing, Japanese 157 westwoodi, Colophon 99 Weasel, Back-striped 17 Weta, Banks Peninsula 254 Weasel, Colombian 17 Weasel, Indonesian Mountain 17 Weta, Kaikoura 209 Weasel, Tropical 195 Weta, Mahoenui Giant 254 Weatherfish 168 Weta, Nelson Alpine 254 Weaver, Asian Golden 164 Weta, Poor Knights 108 Weaver, Bannerman's 57 Weta, Stephens Island 109 Weaver, Bates's 57 Weta, Tusked 254 Weaver, Black-chinned 57 Wetapunga 108 Weaver, Clarke's 57 wetmorei, Buthraupis 54 Weaver, Entebbe 199 wetmorei, Rallus 37 Weaver, Fox's 164 Wetmorethraupis 55 Weaver, Golden-naped 57 wewalkai, Deronectes 248 Weaver, Kilombero 57 weymeri, Papilia 244 Weaver, Lake Lufira 57 weynsi, Cephalophus 141 Weaver, Loango 57 Weaver, Tanzanian Mountain 57 Weaver, Yellow 57 Whale, Baird's Beaked 130 Weaver, Yellow-legged 57 webbi, Eliurus 143 Whale, Blue 18, 225 webbiana, Lampadia 125 weberi, Dermogenys 81 Whale, Bryde's 195 weberi, Prosciurillus 142 Weberogobius 87 Whale, Dwarf Sperm 242 Weevil, Antioch Dune 248 Whale, False Killer 242 Weevil, Blackburn's 185 Whale, Fin 18 Weevil, Brown-tassel 248 Weevil, Coxella 248 Weevil, Dorothy's El Segundo Dune 248 Whale, Gray 129, 225 Weevil, Doyen's Dune 248 Whale, Gray's Beaked 196 Weevil, Flax 248 Weevil, Fort Ross 185 Whale, Hubbs' Beaked 196 Weevil, Gifford's 248 Whale, Humpback 18 Weevil, Kauai 248 Weevil, Knobbled 248 Whale, Killer 129 Weevil, Lange's El Segundo Dune 248 Whale, Lesser Beaked 196 Weevil, Lichen 98 Weevil, Munro's 248 Whale, Melon-headed 242 Weevil, Nelson's 248 Whale, Minke 141 Weevil, Nihoa 248 Weevil, Oahu Nesiotes 248 Weevil, Obscure 248 Whale, Pygmy Blue 225 Weevil, Rulien's 248 Whale, Pygmy Killer 195 Weevil, Stephen's Island 248 Whale, Pygmy Right 242 Weevil, Turbott's 248 Whale, Pygmy Sperm 242 Weevil, Wellington Speargrass 248 Whale, Sei 18 Weevil, Yorba Linda 185 wegneri, Parantica 104 weiskei thalassina, Paratica 237 weiskei, Parantica 244 Whale, Southern Minke 129 Whale, Southern Right 129 Weka 149 wekiwae, Cincinnatia 115 Whale, Sperm 18 welaka, Notropis 202 welcommei, Allochromis 84 Whale, Strap-toothed 196 wellardi, Branchinella 91 Whale, True's Beaked 196 wellekensae, Phyllodiaptomus 92 Whale, White 18 wellsi, Leptotila 39 whartoni, Ducula 39 wengerorum, Stygobromus 90 werneri, Achalinus 61 wheeleri, Arkansia 110 werneri, Iguanognathus 61 wesleyana, Nesopupa 216 Whipbird, Papuan 198 wesselensis, Cristigibba 214 Whipbird, Western 52 westermanni, Elachistodon 200 westlandica, Procellaria 30

Westraltrachia 122, 123

Westralunio 110

Weta, Herekopare Island 254 Whale, Andrews' Beaked 196 Whale, Arnoux's Beaked 130 Whale, Blainville's Beaked 196 Whale, Bowhead 129, 224, 225 Whale, Cuvier's Beaked 197 Whale, Gervais' Beaked 196 Whale, Ginkgo-toothed Beaked 196 Whale, Hector's Beaked 196 Whale, Indo-Pacific Beaked 196 Whale, Long-finned Pilot 242 Whale, Northern Bottlenose 130 Whale, Northern Right 18, 225 Whale, Shepherd's Beaked 197 Whale, Short-finned Pilot 129 Whale, Southern Bottlenose 130 Whale, Sowerby's Beaked 196 Whale, Steineger's Beaked 196 whartoni, Sphaerospira 174 wheeleri, Somatogyrus 212 Whiptail, Orange-throated 200 Whiptail, St Lucia 61 Whistler, Fawn-breasted 160

Whistler, Hooded 159 Whistler, Red-lored 132 Whistler, Tongan 159 Whistler, Vogelkop 160 Whistling-duck, West Indian 32 Whistling-thrush, Malayan 159 Whistling-thrush, Sri Lanka 51 whitakeri, Cycladina 60 White, West Virginia 253 White-eye, Ambon Yellow 162 White-eye, Annobon 54 White-eye, Biak 162 White-eye, Christmas Island 162 White-eye, Crested 161 White-eye, Faichuk 53 White-eye, Ghizo 54 White-eye, Giant 161 White-eye, Golden 53 White-eye, Golden-bellied 162 White-eye, Javan 161 White-eye, Kulal 54 White-eye, Lemon-throated 161 White-eye, Long-billed 161 White-eye, Lord Howe Island 54 White-eye, Mauritius Olive 54 White-eye, Mount Karthala 54 White-eye, Nendo 242 White-eye, Pale-bellied 161 White-eye, Pearl-bellied 161 White-eye, Pemba 162 White-eye, Plain 162 White-eye, Rennell 162 White-eye, Robust 181 White-eye, Rota 54 White-eye, Rufous-throated 53 White-eye, Saipan Bridled 162 White-eye, Samoan 54 White-eye, Sanford's 161 White-eye, São Tomé 54 White-eye, Seychelles 54 White-eye, Slender-billed 54 White-eye, South Pare 54 White-eye, Spot-breasted 161 White-eye, Taita 54 White-eye, White-chested 53 White-eye, White-throated 199 White-eye, Yap Olive 54 Whiteface, Chestnut-breasted 50 Whitefish, Acadian 77 Whitefish, Bottom 204 Whitefish, Cape 71 Whitefish, Large Bottom 204 Whitefish, Northern 204 Whitefish, Opeongo 247 Whitefish, Squanga 247 whiteheadi, Chrotomys 23 whiteheadi, Collocalia 43 whiteheadi, Sitta 161 whiteheadi, Stachyris 160 whiteheadi, Urocissa 164 whitei, Colophon 99 whitei, Ditropis 114 whitei, Hippocampus 82 whitei, Ilydan 80 whiteleggei, Hemistoma 116 whitelyi, Caprimulgus 153 Whitestart, Guaiquinima 56 Whitestart, Paria 56

Whitestart, White-faced 163 whitleyi, Bothriembryon 121 whitneyi, Megalurulus 159 whitneyi, Pomarea 52 whittenorum, Lentipes 87 widdowsoni, Typhlogarra 74 Widowbird, Jackson's 164 wiedii, Leopardus 241 wienerwaldensis, Hauffenia 116 wiesti, Euproserpinus 105 wigginsi, Catostomus 75 wiktori, Malacolimax 175 Wildbeest, Cookson's 228 Wildcat, Scottish 223 Wildebeest, Black 130 Wildebeest, Blue 228 Wildebeest, Blue & White-bearded 130 Wildebeest, Eastern White-bearded228 Wildebeest, Nyassa 228 Wildebeest, Western White-bearded228 Wilfredomys 242 wilhelmina, Antechinus 193 wilhelmina, Paraleptomys 25 wilkawillina umbilicata, Glyptorhagada wilkensi, Mexistenasellus 97 wilkesiella, Phildoria 252 wilkinsi, Nesospiza 55 willardi obscurus, Crotalus 246 williami, Cambarus 94 williamsi, Kimminsoperla 254 williamsi, Mirafra 157 Williamsonia 106 williamsoniana, Aeshna 106 willkommii, Chondrostoma 243 wilmotensis, Beddomeia 115 wilpita, Rasbora 74 wilsoni perkinsi, Celerio 254 wilsoni, Epixerus 142 wilsoni, Hadra 122 wilsoni, Hemignathus 56 wilsoni, Palaina 211 wilsoni, Palaua 215 wimmeri, Crocidura 7 winchelli, Todirhamphus 44 Windbalea 109 winifredae, Scepomycter 52 winifredae, Zosterops 54 winkelmanni, Peromyscus 144 winneckeana, Semotrachia 174 winstoni, Hylopetes 22 winterae, Myrmica 101 wintoni, Cryptochloris 5 wintoni, Laephotis 138 wiseae, Beddomeia 115 wisselensis, Oxyeleotris 206 Wolf, Ethiopian 16 Wolf, Falklands 177 Wolf, Grey 223, 241 Wolf, Maned 140 Wolf, Red 16 wolffsohni, Lagidium 145 wolfi, Aramides 36 wolfi, Bulimulus 126 wollastoni, Hipposideros 137 wollastoni, Leptaxis 125 wolterecki, Paratherina 78

Wolverine 17 Woma 61 Wombat, Common 219 Wombat, Northern Hairy-nosed 4 Womersleymeria 250 Wood-owl, Sichuan 42 Wood-partridge, Bearded 34 Wood-partridge, Long-tailed 149 Wood-pigeon, Andaman 151 Wood-pigeon, Japanese 151 Wood-pigeon, Nilgiri 151 Wood-pigeon, Silvery 38 Wood-pigeon, Sri Lanka 38 Wood-quail, Black-breasted 149 Wood-quail, Black-fronted 149 Wood-quail, Chestnut 149 Wood-quail, Dark-backed 149 Wood-quail, Gorgeted 35 Wood-quail, Tacarcuna 149 Wood-quail, Venezuelan 149 Wood-rail, Brown 36 Wood-wren, Bar-winged 158 Woodcock, Amami 38 Woodcock, Moluccan 38 Woodcock, Sulawesi 150 Woodcreeper, Moustached 45 woodfordi, Corvus 164 woodfordi, Nesoclopeus 36 Woodfordia 161 woodi, Nycteris 136 woodi, Trichastoma 53 Woodnymph, Mexican 44 Woodpecker, Andaman 154 Woodpecker, Arabian 154 Woodpecker, Black-bodied 154 Woodpecker, Choco 155 Woodpecker, Ground 154 Woodpecker, Guadeloupe 155 Woodpecker, Helmeted 45 Woodpecker, Imperial 44 Woodpecker, Ivory-billed 181 Woodpecker, Knysna 154 Woodpecker, Okinawa 45 Woodpecker, Red-cockaded 45 Woodpecker, Red-collared 45 Woodpecker, Stierling's 154 Woodpecker, White-winged 154 Woodpecker, Yellow-browed 155 Woodrat, Allegheny 144 Woodrat, Anthony's 25 Woodrat, Bunker's 25 Woodrat, Key Largo 233 Woodrat, Monterey Dusky-footed233 Woodrat, San Diego Desert 233 Woodrat, San Francisco Dusky-footed Woodrat, San Joaquin Valley 233 Woodrat, San Martin Island 25 woodruffi, Ataenius 250 Woodstar, Chilean 43 Woodstar, Esmeraldas 43 Woodstar, Little 43 Woodstar, Magenta-throated 153 woodwardi, Amytornis 158 Woolly Flying Squirrel 22

Worm, Palolo 209 Worm-lizard, Flinders Ranges 165 Worm-lizard, Hermite Island 234 Worm-skink, Long-legged 60 wortheni, Spizella 55 worthingtoni, Harpagochromis 85 worthingtoni, Prognathochromis 85 worthingtoni, Tropodiaptomus 207 Woundfin 73 Woylie 129, 219 Wrasse, Humphead 87 Wrayanna 210 Wren, Apolinar's 49 Wren, Bush 181 Wren, Clari34n 49 Wren, Cobb's 49 Wren, Nava's 49 Wren, Niceforo's 49 Wren, Socorro 158 Wren, South Island Rock 157 Wren, Stephens Island 181 Wren, Sumichrast's 49 Wren, Zapata 49 Wren-babbler, Bornean 160 Wren-babbler, Falcated 52 Wren-babbler, Large 159 Wren-babbler, Long-billed 160 Wren-babbler, Marbled 159 Wren-babbler, Nepal 160 Wren-babbler, Rabor's 51 Wren-babbler, Rufous-throated 52 Wren-babbler, Rusty-throated 52 Wren-babbler, Spotted 160 Wren-babbler, Striated 160 Wren-babbler, Tawny-breasted 52 Wren-babbler, Wedge-billed 160 Wren-spinetail, Bay-capped 155 wrightae, Rheocles 78 wrighti, Orconectes 94 wrightiana, Alasmidonta 110 wroughtoni, Otomops 13 Wrybill 37 wumizusume, Synthliboramphus 38 wykehami, Lepidochrysops 103 wykehami, Poecilmitis 103 Wvulda 135 wyvilliana, Anas 32 xanthicara, Cyprinella 72 xanthipes, Trogopterus 22 xantholaema, Serinus 57 xantholaemus, Pycnonotus 157 xanthomelas, Megalagrion 106 xanthomus, Agelaius 56 Xanthomyza 54 xanthonotus, Indicator 154 xanthonura, Gallicolumba 151 xanthophrys, Crossleyia 50 xanthophrys, Pseudonestor 56 xanthops, Amazona 40 xanthops, Forpus 40 xanthopterus, Takifugu 207 xanthopus celeris, Petrogale 220 xanthopus xanthopus, Petrogale 220 xanthopus, Petrogale 135 xanthosternos, Cebus 15 Xanthotis 162 xantippe, Crocidura 7 Xantusia

woosnami, Zelotomys 242

worcesteri, Turnix 35

woottoni, Streptocephalus 91

61 XANTUSIIDAE 61 xederoides, Throscodectes 109 XENARTHRA 5, 136, 193 Xenerpestes 155 XENICIDAE 157, 181 Xenicus 157, 181 Xenocalamus 200 Xenocopsychus 161 Xenodacnis 163 xenadactylus, Leptopelis 66 Xenadiscula 216 Xenoglaux 153 Xenoligea 56 Xenomys 145 Xenoophorus 80 Xenoperdix 35 Xenopirostris 49 Xenopoecilus 81 Xenops, Great 45 xenopterus, Laterallus 36 Xenopus 67 Xenornis 46 xenos, Strumigenys 102 Xenospingus 55 Xenospiza 55 xenostoma, Prognathochromis 185 xenothorax, Leptasthenura 45 Xenotriccus 156 Xenuromys 145 Xerarionta 125 xerces, Glaucopsyche 186 Xeromys 27 xerophila, Marmosa 3 Xerosecta 175 xiangxensis, Triplophysa 75 xiphares desmondi, Charaxes 253 xiphares xiphares, Charaxes 253 Xiphias 207, 236 xiphidium, Palaina 211 XIPHIIDAE 207, 236 Xiphirhynchus 161 Xiphocolaptes 45 Xipholena 46 Xiphophorus 80, 205 xiphos, Thrascodectes 109 XIPHOSURA 171, 209 Xolmis 156 xyleborus, Semperdon 214 Xylotoles 185 xynoelictum, Aphaostracon 114 Xyrauchen 75 Xyrichtys 87 Xystichromis 86, 185 yaguarondi cacomitli, Herpailurus 223 Yak, Wild 20 yaleogyna, Kyidris 100 yammerana, Kimboraga 122 yanacensis, Leptasthenura 155 yanoshigehumii, Chamalychaeus 213 Yaqui, Bagre de 75 Yaqui, Trucha de 247 yarkandensis, Lepus 146 yarrellii, Carduelis 56 yarrellii, Eulidia 43 yatesii, Ammonitella 126

yayeyamensis, Asiagomphus 107

yayeyamensis, Leptogomphus 107 Yellow-blossom 255 Yellow-finch, Citron-headed 163 Yellowbrow, Madagascar 50 Yellowfish, Clanwilliam 71 Yellowfish, Largemouth 71 Yellowhead 51 Yellowthroat, Altamira 163 Yellowthroat, Belding's 55 Yellowthroat, Black-polled 56 yemanjae, Attheyella 132 yerelinana, Lacustrelix 173 yersini, Garrulax 50 yesoensis, Myotis 13 yessabahensis, Coenocharopa 214 yessoensis, Emberiza 162 yigara, Euastacus 96 yildizae, Thestar 104 yilongensis, Cyprinus 183 yinnietharra, Ctenophorus 59 ylikiensis, Rutilus 203 yniphora, Geochelone 65 yorbalindae, Trigonoscuta 185 yosemitensis yosemitensis, Monadenia yoshiwarana, Ogasawarana 112 youngi, Peltotrupes 250 youngi, Sinployea 190 youngineri, Distocambarus 94 ypiranganus, Emberizoides 162 Ypthima 254 Yssichromis 86, 185 Yuhina, Burmese 161 Yuhina 161 yunanensis, Rhinolophus 137 yunnanensis, Cuora 200 yunnanensis, Sitta 53 yunnanensis, Tor 74 Yunnanilus 75 yuwonoi, Geoemyda 200 zabelini, Chalepoxenus 100 zacatecae, Reithrodontamys 145 Zaedyus 193 Zaglossus 3 zaharensis, Trachoidea 126 zaisanicus, Harapgoxenus 100 Zaitzeva 249 zaleskyi, Epimyrma 100 Zalophus 224 zamicrus, Nesophontes 177 zammaranoi, Uegitglanis 76 zanandreai, Lethenteron 69 Zander, Volga 206 zanzibaricus, Galago 139 zapahuirensis, Telmatobius 201 zapallarensis, Liolaemus 199 zappeyi, Paradoxornis 51 Zaprochilus 109 Zapus 232, 242 zaratei, Helicella 174 Zaratornis 47 zarhynchus, Peromyscus 26 zarudnyi, Meriones 25 zastictus, Ctenotus 60 Zavattariornis 58 zealandicus, Cyanoramphus 181 zebra zebra, Equus 225

Zebra, Cape Mountain 225 zebra, Cephalophus 21 zebra, Equus 19 Zebra, Grevy's 19 Zebra, Mountain 19 zebra, Perdicella 188 zebratus, Galaxias 168 Zebrilus 147 zebrina, Eua 127 zebrina, Mautodontha 190 zebrina, Perdicella 188 zebroides, Conus 120 zechi, Cryptomys 145 zeehanensis, Beddomeia 115 zeidleri, Calamoecia 91 zeidleri, Fonscochlea 173 zeidlerorum, Jardinella 116 zelandica, Aplonis 164 zelichi, Sporophila 55 Zelotomys 242 Zelotypia 252 Zenacrhopterus 243 Zenaida 180 Zenarchopterus 205 Zenitanago, Suigen 236 zenithicus, Coregonus 77 Zenkerella 145 zenkeri, Idiurus 145 zerda, Fennecus 195 zeregii fahirae, Phoxinellus 236 zeregii meandri, Phoxinellus 236 zeregii, Phoxinellus 168 zerene behrensii, Speyeria 253 zerene hippolyta, Speyeria 253 zerene myrtleae, Speyeria 253 zetides, Battus 105 zeylanicus, Pycnonotus 48 zeylanicus, Suncus 8 zhoui, Cuora 200 zibellina brachyura, Martes 224 zibethicus ripensis, Ondatra 233 ziczac, Agarodes 255 Ziege 202 ziegleri, Chilostoma 215 zigzac ponapense, Pleuropoma 238 zigzac zigzac, Pleuropoma 238 Zilchogyra 125 zimmeri, Crocidura 7 zimmeri, Synallaxis 45 zimmermanni, Crocidura 7 Zingel 84 zinge!, Zingel 84 Zingel 84 Zingis 125 zinseri, Pappogeomys 142 zionis, Physella 113 ZIPHIIDAE 130, 196 Ziphius 197 zae, Paraphlebia 107 Zona 78, 183, 204, 205 zonata, Spekia 119 zonatus, Bostrichthys 206 Zonerodius 147 zongolicensis, Rhamdia 76 Zonites 175 ZONITIDAE 128, 175, 217 Zonitoides 128

Zonocypretta 97 Zoothera 53, 161, 181, 199, 242 zophonastes, Cambarus 94 Zoraena 106 ZORAPTERA 255 Zoroapteran, Swezey's 255 ZOROTYPIDAE 255 Zorotypus 255 Zorto, Grey 241 Zorto, Hoary 195

Zorro, Sechuran 195 Zorro, Small-eared 195 zoserka, Cardiocondyla 100 Zospeum 113 zosterae, Hippocampus 82 Zosterisessor 207 ZOSTEROPIDAE 53, 161, 181, 199, 242 Zosterops 53, 54, 161, 162, 181, 199, 242 Zubovskia 108

zujarensis, Helicella 174 zuliae, Phrynops 62 zullichi, Agriades 102 zuluensis, Streptocephalus 91 zusii, Heliangelus 43 ZYGAENIDAE 187 Zygogeomys 23 zyli, Cryptochloris 5 Zyzomys 27

# Annex 1 Key to Source Codes

The superscript numbers printed next to the status category (or next to the species name in the case of Lists 2, 3 and 5, which each contain species in a single category) refer to the person or group responsible for the final category designation. The sources are listed below. Most assessments have been made by members or associates of an IUCN/SSC Specialist Group (the identity of which will usually be clear from the taxonomic context). The list cites one individual in cases where the assessment has explicitly been carried out largely or entirely by one person (rarely up to three persons are named), or cites the Specialist Group title where the assessment has explicitly been a group activity. The personnel involved in that group can be determined from the current Membership Directory.

In many cases, while not being responsible for the status category assessment, other individuals or organizations have contributed key information on status, trends, taxonomy or distribution. We have attempted to specify all of these in the acknowledgements section. Much taxonomic and distribution information has been derived from the WCMC animals database, to which many sources have contributed over many years.

- 1 Acero, A.
- 2 African Elephant Specialist Group
- 3 African Rhino Specialist Group
- 4 Alberts, A. & Perera, A.
- 5 Allen, G.
- 6 Alonso, R. & Ibanez, M.
- 7 American Fisheries Society Endangered Species Committee
- 8 Amori, G.
- 9 Antelope Specialist Group
- 10 Asian Elephant Specialist Group
- 11 Asian Rhino Specialist Group
- 12 Asian Wild Cattle Specialist Group
- 13 Australasian Marsupial & Monotreme
  - Specialist Group
- 14 Australasian Reptile & Amphibian Specialist Group
- 15 Baillie, J.
- 16 Beaman, K.R.
- 17 Bear Specialist Group
- 18 Bellamy, C.L. & Endrody-Younga, S.
- 19 Benzie, J.
- 20 Bills, R.
- 21 BirdLife International
- 22 Bison Specialist Group

- 23 Blair, D.
- 24 Bogan, A.E.
- 25 Bogan, A.E. & Seddon, M.B.
- 26 Bouchet, P.
- 27 Bouchet, P. & Cosel, R. von
- 28 Bouchet, P. & Ripken, T.
- 29 Bouchet, P. & Seddon, M.B.
- 30 Branch, W.R.
- 31 Brenil, M.
- 32 Breuil, M. & Day, M.
- 33 Brown, D.S.
- 34 Brown, D.S. & Griffiths, O.
- 35 Bruce, B. & Last, P.
- 36 Canid Specialist Group
- 37 Caprinae Specialist Group
- 38 Carrington, C.M.S., Evans, G. & Horrocks, J.
- 39 Carter, R.L. & Hayes, W.K.
- 40 Cat Specialist Group
- 41 Cetacean Specialist Group
- 42 Chiroptera Specialist Group
- 43 Clark, D.
- 44 Clark, D. & Naggs, F.
- 45 Cole, G.
- 46 Compagno, L.
- 47 Compagno, L. & Cook, S.
- 48 Contreras, L.
- 49 Contreras-Balderas, S. & Almada-Villela, P.
- 50 Conyers, J. & Wingate, D.
- 51 Cook, S. & Zorzi, G.
- 52 Cowie, R.H. & Pokryseko, B.
- 53 Cowie, R.H.
- 54 Crandall, K.A.
- 55 Crocodile Specialist Group
- 56 Davis, G.S.
- 57 Day, M.
- 58 Day, M. & Tolson, P.
- 59 Deer Specialist Group
- 60 Dutton, J.
- 61 Edentate Specialist Group
- 62 Eldredge, L.G.
- 63 Emberton, K.C.
- 64 Equid Specialist Group
- 65 European Reptile & Amphibian
  - Specialist Group
- 66 Finet, Y
- 67 Foster, G.
- 68 Fowler, S.
- 69 Fowler, S. & Musick, J.
- 70 Frias-Martin, A.
- 71 Gasgoigne, A.
- 72 George, S.

73	Gerber, G.	130	Pangolin Specialist Group
74	Gibson, R.	131	Pearce-Kelly, P.
75	Gimenez-Dixon, M.	132	Pearson, O.
76	Goodyear, N.	133	Perez, A.M.
77	Griffiths, H.1.	134	Pethiyagoda, R.
78	Griffiths, O.	135	Pigs & Peccaries Specialist Group
79	Haase, M.	136	Polar Bear Specialist Group
80	Haddad, C.F.B.	137	Ponder, W.F. & Varman, R.
81	Hadfield, M. & Hadway, L.	138	Ponder, W.F.
82	Hafner, D.	139	Ponder, W.F. & Slack-Smith, S.
83	Hamer, M.	140	Ponder, W.F. & Smith, B.
84	Hare, J.	141	Ponder, W.F. & Stanisic, J
85	Harrison, D.	142	Preece, R.C.
86	Heaney, L.	143	Primate Specialist Group
87	Heller, J.	144	Punt, A.
88	Henderson, R.	145	Reid, J.W.
89	Hippo Specialist Group	146	Rentz, D.C.F.
90	Hounsome, M.	147	Roberts, C.
91	Huntsman, G.	148	Rodent Specialist Group
92	Hyaena Specialist Group	149	Roth, B.
93	Hyrax Specialist Group	150	Sadovy, Y.
94	Iliffe, T.M.	151	Safina, C.
95	Inland Water Crustacean Specialist Group	152	Schembri, P.J.
96	Insectivore Specialist Group	153	Seal Specialist Group
97	Kaufman, L.	154	Seddon, M.B.
98	Kessner, V.	155	Seddon, M.B. & Solem, A.
99	Kessner, V. & Ponder, W.F.	156	Sherley, G.
100	Kilburn, R.N.	157	Sirenia Specialist Group
101	Kottelat, M.	158	Skelton, P.
102	Kurczewski, F.E.	159	Sket, B.
103	Kuzmin, S.L.	160	Slack-Smith, S.
104	Lagomorph Specialist Group	161	Smith, B.
105	Lepidoptera Specialist Group	162	Sobel, J.
106	Madagascar Reptile & Amphibian	163	Social Insects Specialist Group
	Specialist Group	164	South American Camelid Specialist Group
107	Maeda-Martinez, A.M.	165	Stanisic, J.
108	Mansur, M.C.D.	166	Starmühlner, F.
109	Marine Turtle Specialist Group	167	Steffek, J.
110	Markezich, A.L.	168	Stiassny, M.
111	McAllister, D.	169	Straeten, E. van der
112	McCance, E.	170	Sturgeon Specialist Group
113	McDowall, R.M. & Simons, M.	171	Tapir Specialist Group
114	Mitchell, J.	172	Tattersfield, P.
115	Mollusc Specialist Group	173	Tchabovsky, A.
116	Musick, J.	174	Tolson, P.
117	Mustelid Specialist Group	175	Tomiyama, K.
118	Mylonas, M.	176	Tortoise & Freshwater Turtle Specialist Group
119	Mylonas, M. & Seddon, M.B.	177	Uozumi, Y.
120	Nellis, D.	178	Vincent, A.
121	New World Marsupial Specialist Group	179	Wager, R.
122	New, T.R.	180	Wai, H.
123	Odonata Specialist Group	181	Wells, S.
124	Odum, R.A.	182	Wiewandt, T.
125	Orthopteroid Specialist Group	183	Winter, A. J. de
126	Ottenwalder, J.	184	Wolf Specialist Group
127	Otter Specialist Group	185	World Conservation Monitoring Centre
128	Palazzi, S.	186	Wuster, W.
129	Palazzi, S. & Ripken, T.	999	source unknown

# Annex 2 The IUCN Red List Categories

#### Preamble

The following points present important information on the use and interpretation of the categories (= Critically Endangered, Endangered, etc.), criteria (= A to E), and sub-criteria (= a, b etc., i, ii etc.):

# 1. Taxonomic Level and Scope of the Categorization Process

The criteria can be applied to any taxonomic unit at or below the species level. The term "taxon" in the following notes, definitions and criteria is used for convenience. and may represent species or lower taxonomic levels, including forms that are not yet formally described. There is a sufficient range among the different criteria to enable the appropriate listing of taxa from the complete taxonomic spectrum, with the exception of micro-organisms. The criteria may also be applied within any specified geographical or political area although in such cases special notice should be taken of point 11 below. In presenting the results of applying the criteria, the taxonomic unit and area under consideration should be made explicit. The categorization process should only be applied to wild populations inside their natural range, and to populations resulting from benign introductions (defined in the draft IUCN Guidelines for Reintroductions as ".. an attempt to establish a species, for the purpose of conservation, outside its recorded distribution, but within an appropriate habitat and eco-geographical area").

#### 2. Nature of the Categories

All taxa listed as Critically Endangered qualify for Vulnerable and Endangered, and all listed as Endangered qualify for Vulnerable. Together these categories are described as "threatened". The threatened species categories form a part of the overall scheme. It will be possible to place all taxa into one of the categories (see Figure 1).

#### 3. Role of the Different Criteria

For listing as Critically Endangered, Endangered or Vulnerable there is a range of quantitative criteria; meeting any one of these criteria qualifies a taxon for listing at that level of threat. Each species should be evaluated against all the criteria. The different criteria (A-E) are

derived from a wide review aimed at detecting risk factors across the broad range of organisms and the diverse life histories they exhibit. Even though some criteria will be inappropriate for certain taxa(some taxa will never qualify under these however close to extinction they come), there should be criteria appropriate for assessing threat levels for any taxon (other than micro-organisms). The relevant factor is whether any one criterion is met, not whether all are appropriate or all are met. Because it will never be clear which criteria are appropriate for a particular species in advance, each species should be evaluated against all the criteria, and any criterion met should be listed.

#### 4. Derivation of Quantitative Criteria

The quantitative values presented in the various criteria associated with threatened categories were developed through wide consultation and they are set at what are generally judged to be appropriate levels, even if no formal justification for these values exists. The levels for different criteria within categories were set independently but against a common standard. Some broad consistency between them was sought. However, a given taxon should not be expected to meet all criteria (A-E) in a category; meeting any one criterion is sufficient for listing.

#### 5. Implications of Listing

Listing in the categories of Not Evaluated and Data Deficient indicates that no assessment of extinction risk has been made, though for different reasons. Until such time as an assessment is made, species listed in these categories should not be treated as if they were non-threatened, and it may be appropriate (especially for Data Deficient forms) to give them the same degree of protection as threatened taxa, at least until their status can be evaluated.

Extinction is assumed here to be a chance process. Thus, a listing in a higher extinction risk category implies a higher expectation of extinction, and over the time-frames specified more taxa listed in a higher category are expected to go extinct than in a lower one (without effective conservation action). However, the persistence of some taxa in high risk categories does not necessarily mean their initial assessment was inaccurate.

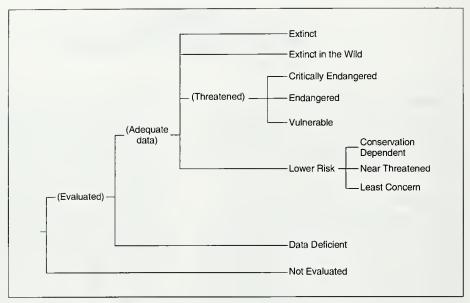


Figure 1. Structure of the Categories.

# 6. Data Quality and the Importance of Inference and Projection

The criteria are clearly quantitative in nature. However, the absence of high quality data should not deter attempts at applying the criteria, as methods involving estimation, inference and projection are emphasized to be acceptable throughout. Inference and projection may be based on extrapolation of current or potential threats into the future (including their rate of change), or of factors related to population abundance or distribution (including dependence on other taxa), so long as these can reasonably be supported. Suspected or inferred patterns in either the recent past, present or near future can be based on any of a series of related factors, and these factors should be specified.

Taxa at risk from threats posed by future events of low probability but with severe consequences (catastrophes) should be identified by the criteria (e.g. small distributions, few locations). Some threats need to be identified particularly early, and appropriate actions taken, because their effects are irreversible, or nearly so (pathogens, invasive organisms, hybridization).

#### 7. Uncertainty

The criteria should be applied on the basis of the available evidence on taxon numbers, trend and distribution, making due allowance for statistical and other uncertain-

ties. Given that data are rarely available for the whole range or population of a taxon, it may often be appropriate to use the information that is available to make intelligent inferences about the overall status of the taxon in question. In cases where a wide variation in estimates is found, it is legitimate to apply the precautionary principle and use the estimate (providing it is credible) that leads to listing in the category of highest risk.

Where data are insufficient to assign a category (including Lower Risk), the category of "Data Deficient" may be assigned. However, it is important to recognize that this category indicates that data are inadequate to determine the degree of threat faced by a taxon, not necessarily that the taxon is poorly known. In cases where there are evident threats to a taxon through, for example, deterioration of its only known habitat, it is important to attempt threatened listing, even though there may be little direct information on the biological status of the taxon itself. The category "Data Deficient" is not a threatened category, although it indicates a need to obtain more information on a taxon to determine the appropriate listing.

#### 8. Conservation Actions in the Listing Process

The criteria for the threatened categories are to be applied to a taxon whatever the level of conservation action affecting it. In cases where it is only conservation action that prevents the taxon from meeting the threatened criteria, the designation of "conservation dependent" is appropriate. It is important to emphasize here that a taxon require conservation action even if it is not listed as threatened.

#### 9. Documentation

All taxon lists including categorization resulting from these criteria should state the criteria and sub-criteria that were met. No listing can be accepted as valid unless at least one criterion is given. If more than one criterion or sub-criterion was met, then each should be listed. However, failure to mention a criterion should not necessarily imply that it was not met. Therefore, if a re-evaluation indicates that the documented criterion is no longer met, this should not result in automatic down-listing. Instead, the taxon should be re-evaluated with respect to all criteria to indicate its status. The factors responsible for triggering the criteria, especially where inference and projection are used, should at least be logged by the evaluator, even if they cannot be included in published lists.

#### 10. Threats and Priorities

The category of threat is not necessarily sufficient to determine priorities for conservation action. The category of threat simply provides an assessment of the likelihood of extinction under current circumstances, whereas a system for assessing priorities for action will include numerous other factors concerning conservation action such as costs, logistics, chances of success, and even perhaps the taxonomic distinctiveness of the subject.

#### 11. Use at Regional Level

The criteria are most appropriately applied to whole taxa at a global scale, rather than to those units defined by regional or national boundaries. Regionally or nationally based threat categories, which are aimed at including taxa that are threatened at regional or national levels (but not necessarily throughout their global ranges), are best used with two key pieces of information: the global status category for the taxon, and the proportion of the global population or range that occurs within the region or nation. However, if applied at regional or national level it must be recognized that a global category of threat may not be the same as a regional or national category for a particular taxon. For example, taxa classified as Vulnerable on the basis of their global declines in numbers or range might be Lower Risk within a particular region where their populations are stable. Conversely, taxa classified as Lower Risk globally might be Critically Endangered within a particular region where numbers are very small or declining, perhaps only

because they are at the margins of their global range. IUCN is still in the process of developing guidelines for the use of national red list categories.

#### 12. Re-evaluation

Evaluation of taxa against the criteria should be carried out at appropriate intervals. This is especially important for taxa listed under near threatened, or conservation dependent, and for threatened species whose status is known or suspected to be deteriorating.

#### 13. Transfer between Categories

There are rules to govern the movement of taxa between categories. These are as follows: (A) A taxon may be moved from a category of higher threat to a category of lower threat if none of the criteria of the higher category has been met for 5 years or more. (B) If the original classification is found to have been erroneous, the taxon may be transferred to the appropriate category or removed from the threatened categories altogether, without delay (but see Section 9). (C) Transfer from categories of lower to higher risk should be made without delay.

#### 14. Problems of Scale

Classification based on the sizes of geographic ranges or the patterns of habitat occupancy is complicated by problems of spatial scale. The finer the scale at which the distributions or habitats of taxa are mapped, the smaller will be the area that they are found to occupy. Mapping at finer scales reveals more areas in which the taxon is unrecorded. It is impossible to provide any strict but general rules for mapping taxa or habitats; the most appropriate scale will depend on the taxa in question, and the origin and comprehensiveness of the distributional data. However, the thresholds for some criteria (e.g. Critically Endangered) necessitate mapping at a fine scale.

#### **Definitions**

#### 1. Population

Population is defined as the total number of individuals of the taxon. For functional reasons, primarily owing to differences between life-forms, population numbers are expressed as numbers of mature individuals only. In the case of taxa obligately dependent on other taxa for all or part of their life cycles, biologically appropriate values for the host taxon should be used.

#### 2. Subpopulations

Subpopulations are defined as geographically or otherwise distinct groups in the population between which

there is little exchange (typically one successful migrant individual or gamete per year or less).

#### 3. Mature Individuals

The number of mature individuals is defined as the number of individuals known, estimated or inferred to be capable of reproduction. When estimating this quantity the following points should be borne in mind:

- Where the population is characterized by natural fluctuations the minimum number should be used.
- This measure is intended to count individuals capable of reproduction and should therefore exclude individuals that are environmentally, behaviorally or otherwise reproductively suppressed in the wild.
- In the case of populations with biased adult or breeding sex ratios it is appropriate to use lower estimates for the number of mature individuals which take this into account (e.g. the estimated effective population size).
- Reproducing units within a clone should be counted as individuals, except where such units are unable to survive alone (e.g. corals).
- In the case of taxa that naturally lose all or a subset of mature individuals at some point in their life cycle, the estimate should be made at the appropriate time, when mature individuals are available for breeding.

#### 4. Generation

Generation may be measured as the average age of parents in the population. This is greater than the age at first breeding, except in taxa where individuals breed only once.

#### 5. Continuing Decline

A continuing decline is a recent, current or projected future decline whose causes are not known or not adequately controlled and so is liable to continue unless remedial measures are taken. Natural fluctuations will not normally count as a continuing decline, but an observed decline should not be considered to be part of a natural fluctuation unless there is evidence for this.

#### 6. Reduction

A reduction (criterion A) is a decline in the number of mature individuals of at least the amount (%) stated over the time period (years) specified, although the decline need not still be continuing. A reduction should not be

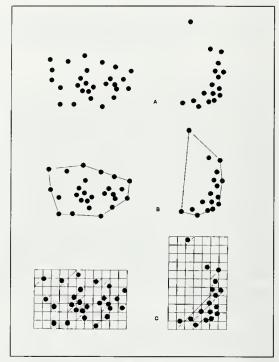


Figure 2. Two examples of the distinction between extent of occurrence and area of occupancy. (a) is the spatial distribution of known, inferred or projected sites of occurrence. (b) shows one possible boundary to the extent of occurrence, which is the measured area within this boundary. (c) shows one measure of area of occupancy which can be measured by the sum of the occupied grid squares.

interpreted as part of a natural fluctuation unless there is good evidence for this. Downward trends that are part of natural fluctuations will not normally count as a reduction.

#### 7. Extreme Fluctuations

Extreme fluctuations occur in a number of taxa where population size or distribution area varies widely, rapidly and frequently, typically with a variation greater than one order of magnitude (i.e., a tenfold increase or decrease).

#### 8. Severely Fragmented

Severely fragmented is refers to the situation where increased extinction risks to the taxon result from the fact that most individuals within a taxon are found in small and relatively isolated subpopulations. These small subpopulations may go extinct, with a reduced probability of recolonization.

#### 9. Extent of Occurrence

Extent of occurrence is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of present occurrence of a taxon, excluding cases of vagrancy. This measure may exclude discontinuities or disjunctions within the overall distributions of taxa (e.g., large areas of obviously unsuitable habitat) (but see "area of occupancy"). Extent of occurrence can often be measured by a minimum convex polygon (the smallest polygon in which no internal angle exceeds 180 degrees and which contains all the sites of occurrence).

#### 10. Area of Occupancy

Area of occupancy is defined as the area within its "extent of occurrence" (see definition) which is occupied by a taxon, excluding cases of vagrancy. The measure reflects the fact that a taxon will not usually occur throughout the area of its extent of occurrence, which may, for example, contain unsuitable habitats. The area of occupancy is the smallest area essential at any stage to the survival of existing populations of a taxon (e.g. colonial nesting sites, feeding sites for migratory taxa). The size of the area of occupancy will be a function of the scale at which it is measured, and should be at a scale appropriate to relevant biological aspects of the taxon. The criteria include values in km2, and thus to avoid errors in classification, the area of occupancy should be measured on grid squares (or equivalents) which are sufficiently small (see Figure 2).

#### 11. Location

Location defines a geographically or ecologically distinct area in which a single event (e.g. pollution) will soon affect all individuals of the taxon present. A location usually, but not always, contains all or part of a subpopulation of the taxon, and is typically a small proportion of the taxon's total distribution.

#### 12. Quantitative Analysis

A quantitative analysis is defined here as the technique of population viability analysis (PVA), or any other quantitative form of analysis, which estimates the extinction probability of a taxon or population based on the known life history and specified management or non-management options. In presenting the results of quantitative analyses the structural equations and the data should be explicit.

#### The Categories

Note: As in previous IUCN categories, the abbreviation of each category (in parenthesis) follows the English denominations when translated into other languages.

#### Extinct (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died.

#### Extinct in the Wild (EW)

A taxon is Extinct in the wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed extinct in the wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

#### Critically Endangered (CR)

A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the criteria (A to E) on pages 15, 16 and 17.

#### Endangered (EN)

A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future, as defined by any of the criteria (A to E) on pages 17 and 18.

#### Vulnerable (VU)

A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future, as defined by any of the criteria (A to D) on pages 19, 20 and 21.

#### Lower Risk (LR)

A taxon is Lower Risk when it has been evaluated, does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa included in the Lower Risk category can be separated into three subcategories:

 Conservation dependent (cd). Taxa which are the focus of a continuing taxon-specific or habitatspecific conservation program targeted towards the

- taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years.
- 2. **Near threatened (nt).** Taxa which do not qualify for conservation dependent, but which are close to qualifying for Vulnerable.
- Least concern (Ic). Taxa which do not qualify for conservation dependent or near threatened.

#### Data Deficient (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution is lacking. Data Deficient is therefore not a category of threat or Lower Risk. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and threatened status. If the range of a taxon is suspected to be relatively circumscribed, if a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

#### Not Evaluated (NE)

A taxon is Not Evaluated when it is has not yet been assessed against the criteria.

# The Criteria for Critically Endangered, Endangered and Vulnerable

#### Critically Endangered (CR)

A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the following criteria (A to E):

# A. Population reduction in the form of either of the following:

 An observed, estimated, inferred or suspected reduction of at least 80% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate for the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
- 2. A reduction of at least 80%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d) or (e) above.
- B. Extent of occurrence estimated to be less than 100 km² or area of occupancy estimated to be less than 10 km², and estimates indicating any two of the following:
- 1. Severely fragmented or known to exist at only a single location.
- 2. Continuing decline, observed, inferred or projected, in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) area, extent and/or quality of habitat
  - (d) number of locations or subpopulations
  - (e) number of mature individuals.
- 3. Extreme fluctuations in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) number of locations or subpopulations
  - (d) number of mature individuals.
- C. Population estimated to number less than 250 mature individuals and either:
- An estimated continuing decline of at least 25% within 3 years or one generation, whichever is longer or
- A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either:
  - (a) severely fragmented (i.e. no subpopulation estimated to contain more than 50 mature individuals)
  - (b) all individuals are in a single subpopulation.

- D. Population estimated to number less than 50 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or 3 generations, whichever is the longer.

#### Endangered (EN)

A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future, as defined by any of the following criteria (A to E):

## A. Population reduction in the form of either of the following:

- 1. An observed, estimated, inferred or suspected reduction of at least 50% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:
  - (a) direct observation
  - (b) an index of abundance appropriate for the taxon
  - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
  - (d) actual or potential levels of exploitation
  - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.
- 2. A reduction of at least 50%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d) or (e) above.
- B. Extent of occurrence estimated to be less than 5000 km<sup>2</sup> or area of occupancy estimated to be less than 500 km<sup>2</sup>, and estimates indicating any two of the following:
- Severely fragmented or known to exist at no more than five locations.
- 2. Continuing decline, inferred, observed or projected, in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) area, extent and/or quality of habitat
  - (d) number of locations or subpopulations
  - (e) number of mature individuals.

- 3. Extreme fluctuations in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) number of locations or subpopulations
  - (d) number of mature individuals.

### C. Population estimated to number less than 2,500 mature individuals and either:

- 1. An estimated continuing decline of at least 20% within 5 years or 2 generations, whichever is longer, or
- A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either:
  - (a) severely fragmented (i.e. no subpopulation estimated to contain more than 250 mature individuals)
  - (b) all individuals are in a single subpopulation.
- D. Population estimated to number less than 250 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or 5 generations, whichever is the longer.

#### Vulnerable (VU)

A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future, as defined by any of the following criteria (A to E):

# A. Population reduction in the form of either of the following:

- An observed, estimated, inferred or suspected reduction of at least 20% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:
  - (a) direct observation
  - (b) an index of abundance appropriate for the taxon
  - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
  - (d) actual or potential levels of exploitation
  - (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

- 2. A reduction of at least 20%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d) or (e) above.
- B. Extent of occurrence estimated to be less than 20,000 km² or area of occupancy estimated to be less than 2,000 km², and estimates indicating any two of the following:
- Severely fragmented or known to exist at no more than ten locations.
- 2. Continuing decline, inferred, observed or projected, in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) area, extent and/or quality of habitat
  - (d) number of locations or subpopulations
  - (e) number of mature individuals.
- 3. Extreme fluctuations in any of the following:
  - (a) extent of occurrence
  - (b) area of occupancy
  - (c) number of locations or subpopulations
  - (d) number of mature individuals.
- C. Population estimated to number less than 10,000 mature individuals and either:
- An estimated continuing decline of at least 10% within 10 years or 3 generations, whichever is longer, or

- A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either
  - (a) severely fragmented (i.e. no subpopulation estimated to contain more than 1,000 mature individuals)
  - (b) all individuals are in a single subpopulation.

# D. Population very small or restricted in the form of either of the following:

- Population estimated to number less than 1,000 mature individuals.
- 2. Population is characterized by an acute restriction in its area of occupancy (typically less than 100 km²) or in the number of locations (typically less than 5). Such a taxon would thus be prone to the effects of human activities (or stochastic events whose impact is increased by human activities) within a very short period of time in an unforeseeable future, and is thus capable of becoming Critically Endangered or even Extinct in a very short period.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.

## Previous Editions of the IUCN Red List of Threatened Animals

1986 IUCN Red List of Threatened Animals. Compiled by the IUCN Conservation Monitoring Centre. IUCN, Gland, Switzerland. 105 pp.

1988 IUCN Red List of Threatened Animals. Compiled by the IUCN Conservation Monitoring Centre. Guest Essay by B. Wilcox. IUCN, Gland, Switzerland. 154 pp.

1990 IUCN Red List of Threatened Animals. Compiled by the World Conservation Monitoring Centre. Guest Essay by N. Flesness and T. Foose. IUCN, Gland, Switzerland. 192 pp.

1994 IUCN Red List of Threatened Animals. Compiled by the World Conservation Monitoring Centre. Edited by B. Groombridge. Guest Essay by G. Mace. IUCN, Gland, Switzerland. 286 pp.

#### **IUCN/Species Survival Commission**

The Species Survival Commission (SSC) is one of a volunteer commission, of IUCN. The World Conservation Union, a union of covereign states government agencies and non-governmental organization. IUCN has three basic conservation objectives to accure the conservation of nature, and especially of biological diversity as an essential found it on of the tuture to ensure that where the earth's natural resources are used this is done in a wise equitable, and untainable way and to guide the development of human communities toward ways of He that are both of good quality and in enduring humany with other components of the biosphere.

The SCCs may on is to conserve biological diversity by developing and executing programs to cludy, save, restore and manage witely species and their habitat. A volunteer network comprised of narrly 7,000 scient at a field relear hers, government office than door rivation leader from 179 countries the SCC membership in an unmatched source of information about biological diversity and its conservation. A south SCC members provide to him all and scientific counted for concervation projects throughout the world and serve at mours, sto government, international convention, and concervation organization.

The Red Data Book concept was originated by a former 3.5C Chair. Sir Picter Scott in the mid 19.0. Red Data Book are cut roque of information on special threatened with extract in and they aim to focus attention to the pight of the curth invanishing wildlife. The concept has been out tandingly suice after and if there discard. Later many national regional and global Red Data Book. If we been published. Many more countries are in the process of complang their own list of threatened, pecies.

The demand for a simple international of that categorizes the statul of qlobary threatened that is growing partly as a result of the increasing number of international convention. It was to meet the need that the first IUCN Red to 1 of flare item dish malls was published in 1985. Further edition, were published in 1988, 1990, and 1934.

thate in 1994, IUCN adopted a new system of categories of threat the 1996 IUCN R of List of Threatened Arimals is its first tip application. An objective set of internal resided to determine species status as we as the factors that are threatening them. The process of diveloping tristing and variation githenew system has involved ready 1,000 section from the status of a randic continuing. Due to its transparent nature at its cary to re-evaluate the status of a species in light of new information, and in the way, the Red List hould be viewed as a fixing document.

Although the length of the Red List is obering, the information it presents is of fundamental value to crient standing and decision makes are published for the List thand well being of our environment.





